

CUT100

RELIABILITY DATA

信頼性データ

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※ 試験結果は、代表データではありますが、全ての製品はほぼ同等な特性を示します。
従いまして、以下の結果は実力値とお考え願います。

Test results are typical data. Nevertheless the following results are considered to be
actual capability data because all units have nearly the same characteristics.

1. MTBF計算値 Calculated Values of MTBF

MODEL : CUT100

(1) 算出方法 Calculating Method

JEITA (RCR-9102B)の部品点数法で算出されています。
 それぞれの部品ごとに、部品故障率 λ_G が与えられ、各々の点数によって決定されます。
 Calculated based on part count reliability projection of JEITA (RCR-9102B).
 Individual failure rates λ_G is given to each part and MTBF is calculated
 by the count of each part.

<算出式>

$$MTBF = \frac{1}{\lambda_{equip}} = \frac{1}{\sum_{i=1}^n n_i (\lambda_G \pi_Q)_i} \times 10^6 \quad \text{時間(Hours)}$$

λ_{equip} : 全機器故障率 (故障数/10⁶時間)
 Total Equipment Failure Rate (Failure/10⁶Hours)

λ_G : i 番目の同属部品に対する故障率 (故障数/10⁶時間)
 Generic Failure Rate for The ith Generic Part (Failure/10⁶Hours)

n_i : i 番目の同属部品の個数
 Quantity of ith Generic Part

n : 異なった同属部品のカテゴリーの数
 Number of Different Generic Part Categories

π_Q : i 番目の同属部品に対する品質ファクタ ($\pi_Q=1$)
 Generic Quality Factor for The ith Generic Part ($\pi_Q=1$)

(2) MTBF値 MTBF Values

G_F : 地上固定 (Ground, Fixed)

RCR-9102B

MTBF $\hat{=}$ 115,059 時間 (Hours)

2. 部品ディレーティング Components Derating

MODEL : CUT100-522

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45°C
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 8.0A +12V, 4.0A -12V, 1.0A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25°C
Case Temperature at Start Point of Derating; 25°C in General

T_a : ディレーティングの始まる周囲温度 一般に25°C
Ambient Temperature at Start Point of Derating; 25°C in General

T_l : ディレーティングの始まるリード温度 一般に25°C
Lead Temperature at Start Point of Derating; 25°C in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
($T_{ch}(\max)$) Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
(θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	$V_{in} = 100VAC$	Load = 100%	$T_a = 45^{\circ}C$
D1 GBUL1006-B1 YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 1.91W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 116.6^{\circ}C$ D.F. = 77.7%	$\theta_{j-c} = 2.0^{\circ}C/W$ $\Delta T_c = 67.8^{\circ}C$	$T_c = 112.8^{\circ}C$
Q1 TK16A60W,S4VX TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 2.66W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 121.8^{\circ}C$ D.F. = 81.2%	$\theta_{ch-c} = 3.13^{\circ}C/W$ $\Delta T_c = 68.5^{\circ}C$	$T_c = 113.5^{\circ}C$
Q2 TK7A65W,S5X TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 1.51W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 114.2^{\circ}C$ D.F. = 76.1%	$\theta_{ch-c} = 4.17^{\circ}C/W$ $\Delta T_c = 62.9^{\circ}C$	$T_c = 107.9^{\circ}C$
Q3 TK7A65W,S5X TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 1.80W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 108.5^{\circ}C$ D.F. = 72.3%	$\theta_{ch-c} = 4.17^{\circ}C/W$ $\Delta T_c = 56.0^{\circ}C$	$T_c = 101.0^{\circ}C$
D51 MBRL3065FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 2.40W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 120.8^{\circ}C$ D.F. = 80.5%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 66.2^{\circ}C$	$T_c = 111.2^{\circ}C$
D52 MBRL3065FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 2.40W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 117.9^{\circ}C$ D.F. = 78.6%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 63.3^{\circ}C$	$T_c = 108.3^{\circ}C$
D61 MBRL30150FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 3.36W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 126.4^{\circ}C$ D.F. = 84.4%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 68.2^{\circ}C$	$T_c = 113.2^{\circ}C$
D62 MBRL30150FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 0.84W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 101.1^{\circ}C$ D.F. = 67.4%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 52.7^{\circ}C$	$T_c = 97.7^{\circ}C$

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.87W Tj = Tc + ((θj-c) × Pd) = 85.7°C D.F. = 57.2%	θj-c = 2.0°C/W ΔTc = 39.0°C	Tc = 84.0°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.26W Tj = Tc + ((θch-c) × Pch) = 97.1°C D.F. = 64.8%	θch-c = 3.13°C/W ΔTc = 48.2°C	Tc = 93.2°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.56W Tj = Tc + ((θch-c) × Pch) = 101.6°C D.F. = 67.7%	θch-c = 4.17°C/W ΔTc = 50.1°C	Tc = 95.1°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.68W Tj = Tc + ((θch-c) × Pch) = 99.0°C D.F. = 66.0%	θch-c = 4.17°C/W ΔTc = 47.0°C	Tc = 92.0°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 119.5°C D.F. = 79.7%	θj-c = 4.0°C/W ΔTc = 64.9°C	Tc = 109.9°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 116.8°C D.F. = 77.9%	θj-c = 4.0°C/W ΔTc = 62.2°C	Tc = 107.2°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.36W Tj = Tc + ((θj-c) × Pd) = 125.7°C D.F. = 83.8%	θj-c = 4.0°C/W ΔTc = 67.3°C	Tc = 112.3°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.84W Tj = Tc + ((θj-c) × Pd) = 100.5°C D.F. = 67.0%	θj-c = 4.0°C/W ΔTc = 52.1°C	Tc = 97.1°C

2. 部品ディレーティング Components Derating

MODEL : CUT100-522

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45°C
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 10A +12V, 3.5A -12V, 0.5A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25°C
Case Temperature at Start Point of Derating; 25°C in General

T_a : ディレーティングの始まる周囲温度 一般に25°C
Ambient Temperature at Start Point of Derating; 25°C in General

T_l : ディレーティングの始まるリード温度 一般に25°C
Lead Temperature at Start Point of Derating; 25°C in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
($T_{ch}(\max)$) Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
(θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 100VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.89W Tj = Tc + ((θj-c) × Pd) = 114.6°C D.F. = 76.4%	θj-c = 2.0°C/W ΔTc = 65.8°C	Tc = 110.8°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 2.35W Tj = Tc + ((θch-c) × Pch) = 120.0°C D.F. = 80.0%	θch-c = 3.13°C/W ΔTc = 67.6°C	Tc = 112.6°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.63W Tj = Tc + ((θch-c) × Pch) = 114.4°C D.F. = 76.3%	θch-c = 4.17°C/W ΔTc = 62.6°C	Tc = 107.6°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.68W Tj = Tc + ((θch-c) × Pch) = 106.5°C D.F. = 71.0%	θch-c = 4.17°C/W ΔTc = 54.5°C	Tc = 99.5°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 126.7°C D.F. = 84.5%	θj-c = 4.0°C/W ΔTc = 69.7°C	Tc = 114.7°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 122.8°C D.F. = 81.9%	θj-c = 4.0°C/W ΔTc = 65.8°C	Tc = 110.8°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.94W Tj = Tc + ((θj-c) × Pd) = 120.4°C D.F. = 80.2%	θj-c = 4.0°C/W ΔTc = 63.6°C	Tc = 108.6°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 95.4°C D.F. = 63.6%	θj-c = 4.0°C/W ΔTc = 48.7°C	Tc = 93.7°C

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC Load = 100% Ta = 45°C		
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.85W Tj = Tc + ((θj-c) × Pd) = 84.5°C D.F. = 56.3%	θj-c = 2.0°C/W ΔTc = 37.8°C	Tc = 82.8°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.24W Tj = Tc + ((θch-c) × Pch) = 96.5°C D.F. = 64.3%	θch-c = 3.13°C/W ΔTc = 47.6°C	Tc = 92.6°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.65W Tj = Tc + ((θch-c) × Pch) = 102.0°C D.F. = 68.0%	θch-c = 4.17°C/W ΔTc = 50.1°C	Tc = 95.1°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.69W Tj = Tc + ((θch-c) × Pch) = 97.8°C D.F. = 65.2%	θch-c = 4.17°C/W ΔTc = 45.7°C	Tc = 90.7°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 125.5°C D.F. = 83.7%	θj-c = 4.0°C/W ΔTc = 68.5°C	Tc = 113.5°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 121.9°C D.F. = 81.3%	θj-c = 4.0°C/W ΔTc = 64.9°C	Tc = 109.9°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.94W Tj = Tc + ((θj-c) × Pd) = 119.7°C D.F. = 79.8%	θj-c = 4.0°C/W ΔTc = 62.9°C	Tc = 107.9°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 94.9°C D.F. = 63.3%	θj-c = 4.0°C/W ΔTc = 48.2°C	Tc = 93.2°C

2. 部品ディレーティング Components Derating

MODEL : CUT100-522

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45℃
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 12A +12V, 2.8A -12V, 0.5A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25℃
Case Temperature at Start Point of Derating; 25℃ in General

T_a : ディレーティングの始まる周囲温度 一般に25℃
Ambient Temperature at Start Point of Derating; 25℃ in General

T_l : ディレーティングの始まるリード温度 一般に25℃
Lead Temperature at Start Point of Derating; 25℃ in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
 $(T_{ch}(\max))$ Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
 (θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	$V_{in} = 100VAC$	Load = 100%	$T_a = 45^{\circ}C$
D1 GBUL1006-B1 YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 1.91W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 118.6^{\circ}C$ D.F. = 79.1%	$\theta_{j-c} = 2.0^{\circ}C/W$ $\Delta T_c = 69.8^{\circ}C$	$T_c = 114.8^{\circ}C$
Q1 TK16A60W,S4VX TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 2.63W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 124.7^{\circ}C$ D.F. = 83.2%	$\theta_{ch-c} = 3.13^{\circ}C/W$ $\Delta T_c = 71.5^{\circ}C$	$T_c = 116.5^{\circ}C$
Q2 TK7A65W,S5X TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 1.94W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 120.1^{\circ}C$ D.F. = 80.1%	$\theta_{ch-c} = 4.17^{\circ}C/W$ $\Delta T_c = 67.0^{\circ}C$	$T_c = 112.0^{\circ}C$
Q3 TK7A65W,S5X TOSHIBA	$T_{ch} (max) = 150^{\circ}C$ $P_{ch} = 1.49W$ $T_j = T_c + ((\theta_{ch-c}) \times P_{ch}) = 107.4^{\circ}C$ D.F. = 71.6%	$\theta_{ch-c} = 4.17^{\circ}C/W$ $\Delta T_c = 56.2^{\circ}C$	$T_c = 101.2^{\circ}C$
D51 MBRL3065FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 3.60W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 137.6^{\circ}C$ D.F. = 91.7%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 78.2^{\circ}C$	$T_c = 123.2^{\circ}C$
D52 MBRL3065FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 3.60W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 134.6^{\circ}C$ D.F. = 89.7%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 75.2^{\circ}C$	$T_c = 120.2^{\circ}C$
D61 MBRL30150FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 2.35W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 120.0^{\circ}C$ D.F. = 80.0%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 65.6^{\circ}C$	$T_c = 110.6^{\circ}C$
D62 MBRL30150FCT YANGJIE ELECTRIC	$T_j (max) = 150^{\circ}C$ $P_d = 0.42W$ $T_j = T_c + ((\theta_{j-c}) \times P_d) = 98.1^{\circ}C$ D.F. = 65.4%	$\theta_{j-c} = 4.0^{\circ}C/W$ $\Delta T_c = 51.4^{\circ}C$	$T_c = 96.4^{\circ}C$

MODEL : CUT100-522

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.87W Tj = Tc + ((θj-c) × Pd) = 86.9°C D.F. = 58.0%	θj-c = 2.0°C/W ΔTc = 40.2°C	Tc = 85.2°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.24W Tj = Tc + ((θch-c) × Pch) = 98.9°C D.F. = 65.9%	θch-c = 3.13°C/W ΔTc = 50.0°C	Tc = 95.0°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.97W Tj = Tc + ((θch-c) × Pch) = 106.8°C D.F. = 71.2%	θch-c = 4.17°C/W ΔTc = 53.6°C	Tc = 98.6°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.52W Tj = Tc + ((θch-c) × Pch) = 97.9°C D.F. = 65.3%	θch-c = 4.17°C/W ΔTc = 46.6°C	Tc = 91.6°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 136.2°C D.F. = 90.8%	θj-c = 4.0°C/W ΔTc = 76.8°C	Tc = 121.8°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 133.5°C D.F. = 89.0%	θj-c = 4.0°C/W ΔTc = 74.1°C	Tc = 119.1°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.35W Tj = Tc + ((θj-c) × Pd) = 119.1°C D.F. = 79.4%	θj-c = 4.0°C/W ΔTc = 64.7°C	Tc = 109.7°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 97.3°C D.F. = 64.9%	θj-c = 4.0°C/W ΔTc = 50.6°C	Tc = 95.6°C

2. 部品ディレーティング Components Derating

MODEL : CUT100-5FF

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45°C
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 8.0A +15V, 3.0A -15V, 1.0A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25°C
Case Temperature at Start Point of Derating; 25°C in General

T_a : ディレーティングの始まる周囲温度 一般に25°C
Ambient Temperature at Start Point of Derating; 25°C in General

T_l : ディレーティングの始まるリード温度 一般に25°C
Lead Temperature at Start Point of Derating; 25°C in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
($T_{ch}(\max)$) Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
(θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-5FF

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 100VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.91W Tj = Tc + ((θj-c) × Pd) = 116.4°C D.F. = 77.6%	θj-c = 2.0°C/W ΔTc = 67.6°C	Tc = 112.6°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 2.60W Tj = Tc + ((θch-c) × Pch) = 121.7°C D.F. = 81.2%	θch-c = 3.13°C/W ΔTc = 68.6°C	Tc = 113.6°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.51W Tj = Tc + ((θch-c) × Pch) = 114.6°C D.F. = 76.4%	θch-c = 4.17°C/W ΔTc = 63.3°C	Tc = 108.3°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.96W Tj = Tc + ((θch-c) × Pch) = 110.7°C D.F. = 73.8%	θch-c = 4.17°C/W ΔTc = 57.5°C	Tc = 102.5°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 115.5°C D.F. = 77.0%	θj-c = 4.0°C/W ΔTc = 60.9°C	Tc = 105.9°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 115.9°C D.F. = 77.3%	θj-c = 4.0°C/W ΔTc = 61.3°C	Tc = 106.3°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.52W Tj = Tc + ((θj-c) × Pd) = 115.8°C D.F. = 77.2%	θj-c = 4.0°C/W ΔTc = 60.7°C	Tc = 105.7°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.84W Tj = Tc + ((θj-c) × Pd) = 98.1°C D.F. = 65.4%	θj-c = 4.0°C/W ΔTc = 49.7°C	Tc = 94.7°C

MODEL : CUT100-5FF

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC Load = 100% Ta = 45°C		
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.87W Tj = Tc + ((θj-c) × Pd) = 85.2°C D.F. = 56.8%	θj-c = 2.0°C/W ΔTc = 38.5°C	Tc = 83.5°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.21W Tj = Tc + ((θch-c) × Pch) = 96.6°C D.F. = 64.4%	θch-c = 3.13°C/W ΔTc = 47.8°C	Tc = 92.8°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.56W Tj = Tc + ((θch-c) × Pch) = 100.9°C D.F. = 67.3%	θch-c = 4.17°C/W ΔTc = 49.4°C	Tc = 94.4°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.99W Tj = Tc + ((θch-c) × Pch) = 100.9°C D.F. = 67.3%	θch-c = 4.17°C/W ΔTc = 47.6°C	Tc = 92.6°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 113.5°C D.F. = 75.7%	θj-c = 4.0°C/W ΔTc = 58.9°C	Tc = 103.9°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.40W Tj = Tc + ((θj-c) × Pd) = 114.1°C D.F. = 76.1%	θj-c = 4.0°C/W ΔTc = 59.5°C	Tc = 104.5°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.52W Tj = Tc + ((θj-c) × Pd) = 114.3°C D.F. = 76.2%	θj-c = 4.0°C/W ΔTc = 59.2°C	Tc = 104.2°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.84W Tj = Tc + ((θj-c) × Pd) = 96.7°C D.F. = 64.4%	θj-c = 4.0°C/W ΔTc = 48.3°C	Tc = 93.3°C

2. 部品ディレーティング Components Derating

MODEL : CUT100-5FF

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45℃
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 10A +15V, 2.8A -15V, 0.5A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25℃
Case Temperature at Start Point of Derating; 25℃ in General

T_a : ディレーティングの始まる周囲温度 一般に25℃
Ambient Temperature at Start Point of Derating; 25℃ in General

T_l : ディレーティングの始まるリード温度 一般に25℃
Lead Temperature at Start Point of Derating; 25℃ in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
($T_{ch}(\max)$) Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
(θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-5FF

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 100VAC Load = 100% Ta = 45°C		
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.90W Tj = Tc + ((θj-c) × Pd) = 116.5°C D.F. = 77.7%	θj-c = 2.0°C/W ΔTc = 67.7°C	Tc = 112.7°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 2.59W Tj = Tc + ((θch-c) × Pch) = 122.5°C D.F. = 81.7%	θch-c = 3.13°C/W ΔTc = 69.4°C	Tc = 114.4°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.63W Tj = Tc + ((θch-c) × Pch) = 116.6°C D.F. = 77.7%	θch-c = 4.17°C/W ΔTc = 64.8°C	Tc = 109.8°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.49W Tj = Tc + ((θch-c) × Pch) = 108.8°C D.F. = 72.5%	θch-c = 4.17°C/W ΔTc = 57.6°C	Tc = 102.6°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 126.6°C D.F. = 84.4%	θj-c = 4.0°C/W ΔTc = 69.6°C	Tc = 114.6°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 124.7°C D.F. = 83.1%	θj-c = 4.0°C/W ΔTc = 67.7°C	Tc = 112.7°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.35W Tj = Tc + ((θj-c) × Pd) = 116.2°C D.F. = 77.4%	θj-c = 4.0°C/W ΔTc = 61.8°C	Tc = 106.8°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 96.1°C D.F. = 64.1%	θj-c = 4.0°C/W ΔTc = 49.4°C	Tc = 94.4°C

MODEL : CUT100-5FF

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC Load = 100% Ta = 45°C		
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.86W Tj = Tc + ((θj-c) × Pd) = 85.4°C D.F. = 56.9%	θj-c = 2.0°C/W ΔTc = 38.7°C	Tc = 83.7°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.19W Tj = Tc + ((θch-c) × Pch) = 97.2°C D.F. = 64.8%	θch-c = 3.13°C/W ΔTc = 48.5°C	Tc = 93.5°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.65W Tj = Tc + ((θch-c) × Pch) = 103.0°C D.F. = 68.7%	θch-c = 4.17°C/W ΔTc = 51.1°C	Tc = 96.1°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.43W Tj = Tc + ((θch-c) × Pch) = 98.8°C D.F. = 65.8%	θch-c = 4.17°C/W ΔTc = 47.8°C	Tc = 92.8°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 124.9°C D.F. = 83.3%	θj-c = 4.0°C/W ΔTc = 67.9°C	Tc = 112.9°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.00W Tj = Tc + ((θj-c) × Pd) = 123.3°C D.F. = 82.2%	θj-c = 4.0°C/W ΔTc = 66.3°C	Tc = 111.3°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 2.35W Tj = Tc + ((θj-c) × Pd) = 114.9°C D.F. = 76.6%	θj-c = 4.0°C/W ΔTc = 60.5°C	Tc = 105.5°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 95.0°C D.F. = 63.3%	θj-c = 4.0°C/W ΔTc = 48.3°C	Tc = 93.3°C

2. 部品ディレーティング Components Derating

MODEL : CUT100-5FF

(1) 算出方法 Calculating Method

(a) 測定方法 Measuring method

・取付方法 Mounting method	: 標準取付 : B Standard mounting : B	・周囲温度 Ambient temperature	: 45°C
・入力電圧 Input voltage	: 100, 230VAC	・出力電圧、電流 Output voltage & current	: 5V, 12A +15V, 2.2A -15V, 0.5A

(b) 半導体 Semiconductors

ケース温度、消費電力、熱抵抗より使用状態の接合点温度を求め
最大定格、接合点温度との比較を求めました。

Compared with maximum junction temperature and actual one which is calculated
based on case temperature, power dissipation and thermal impedance.

(c) IC、抵抗、コンデンサ等 IC, Resistors, Capacitors, etc.

周囲温度、使用状態、消費電力など、個々の値は設計基準内に入っています。

Ambient temperature, operating condition, power dissipation and so on are within
derating criteria.

(d) 熱抵抗算出方法 Calculating method of thermal impedance

$$\theta_{j-c} = \frac{T_j(\max) - T_c}{P_{ch}(\max)} \quad \theta_{j-a} = \frac{T_j(\max) - T_a}{P_{ch}(\max)} \quad \theta_{j-l} = \frac{T_j(\max) - T_l}{P_{ch}(\max)}$$

T_c : ディレーティングの始まるケース温度 一般に25°C
Case Temperature at Start Point of Derating; 25°C in General

T_a : ディレーティングの始まる周囲温度 一般に25°C
Ambient Temperature at Start Point of Derating; 25°C in General

T_l : ディレーティングの始まるリード温度 一般に25°C
Lead Temperature at Start Point of Derating; 25°C in General

$P_{ch}(\max)$: 最大チャネル損失
Maximum Channel Dissipation

$T_j(\max)$: 最大接合点(チャネル)温度
($T_{ch}(\max)$) Maximum Junction (channel) Temperature

θ_{j-c} : 接合点(チャネル)からケースまでの熱抵抗
(θ_{ch-c}) Thermal Impedance between Junction (channel) and Case

θ_{j-a} : 接合点から周囲までの熱抵抗
Thermal Impedance between Junction and air

θ_{j-l} : 接合点からリードまでの熱抵抗
Thermal Impedance between Junction and Lead

MODEL : CUT100-5FF

(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 100VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.91W Tj = Tc + ((θj-c) × Pd) = 116.7°C D.F. = 77.8%	θj-c = 2.0°C/W ΔTc = 67.9°C	Tc = 112.9°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 2.61W Tj = Tc + ((θch-c) × Pch) = 123.2°C D.F. = 82.1%	θch-c = 3.13°C/W ΔTc = 70.0°C	Tc = 115.0°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.95W Tj = Tc + ((θch-c) × Pch) = 118.9°C D.F. = 79.3%	θch-c = 4.17°C/W ΔTc = 65.8°C	Tc = 110.8°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.38W Tj = Tc + ((θch-c) × Pch) = 107.1°C D.F. = 71.4%	θch-c = 4.17°C/W ΔTc = 56.3°C	Tc = 101.3°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 131.1°C D.F. = 87.4%	θj-c = 4.0°C/W ΔTc = 71.7°C	Tc = 116.7°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 132.8°C D.F. = 88.5%	θj-c = 4.0°C/W ΔTc = 73.4°C	Tc = 118.4°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.85W Tj = Tc + ((θj-c) × Pd) = 112.0°C D.F. = 74.7%	θj-c = 4.0°C/W ΔTc = 59.6°C	Tc = 104.6°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 95.7°C D.F. = 63.8%	θj-c = 4.0°C/W ΔTc = 49.0°C	Tc = 94.0°C

MODEL : CUT100-5FF

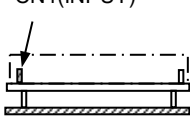
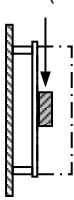
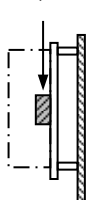
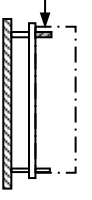
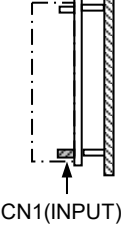
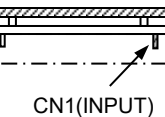
(2) 部品ディレーティング表 Component Derating List

部品番号 Location No.	Vin = 230VAC	Load = 100%	Ta = 45°C
D1 GBUL1006-B1 YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.87W Tj = Tc + ((θj-c) × Pd) = 85.5°C D.F. = 57.0%	θj-c = 2.0°C/W ΔTc = 38.8°C	Tc = 83.8°C
Q1 TK16A60W,S4VX TOSHIBA	Tch (max) = 150°C Pch = 1.22W Tj = Tc + ((θch-c) × Pch) = 97.5°C D.F. = 65.0%	θch-c = 3.13°C/W ΔTc = 48.7°C	Tc = 93.7°C
Q2 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.97W Tj = Tc + ((θch-c) × Pch) = 104.9°C D.F. = 69.9%	θch-c = 4.17°C/W ΔTc = 51.7°C	Tc = 96.7°C
Q3 TK7A65W,S5X TOSHIBA	Tch (max) = 150°C Pch = 1.24W Tj = Tc + ((θch-c) × Pch) = 96.3°C D.F. = 64.2%	θch-c = 4.17°C/W ΔTc = 46.1°C	Tc = 91.1°C
D51 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 129.2°C D.F. = 86.1%	θj-c = 4.0°C/W ΔTc = 69.8°C	Tc = 114.8°C
D52 MBRL3065FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 3.60W Tj = Tc + ((θj-c) × Pd) = 131.3°C D.F. = 87.5%	θj-c = 4.0°C/W ΔTc = 71.9°C	Tc = 116.9°C
D61 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 1.85W Tj = Tc + ((θj-c) × Pd) = 110.8°C D.F. = 73.9%	θj-c = 4.0°C/W ΔTc = 58.4°C	Tc = 103.4°C
D62 MBRL30150FCT YANGJIE ELECTRIC	Tj (max) = 150°C Pd = 0.42W Tj = Tc + ((θj-c) × Pd) = 94.5°C D.F. = 63.0%	θj-c = 4.0°C/W ΔTc = 47.8°C	Tc = 92.8°C

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	8.0A,4.0A,1.0A					

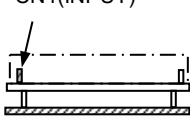
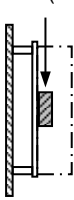
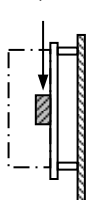
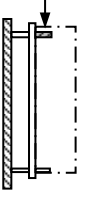
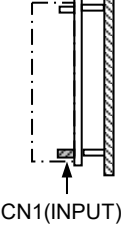
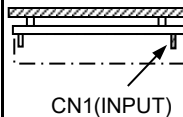
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	58.8	51.7	58.0	59.7	50.0	68.3
A103	IC	55.9	48.3	55.4	55.2	50.1	64.6
A104	IC	50.9	42.7	55.7	54.0	44.9	63.0
A201	IC	50.8	47.4	45.8	43.0	56.0	56.5
A301	IC	54.6	48.7	49.8	47.2	55.7	62.3
C4	Cap., Film	58.6	56.9	56.0	61.5	54.7	62.0
C5	E.CAP.	46.2	41.0	53.2	49.3	41.9	56.9
C51	E.CAP.	39.5	45.0	37.0	36.5	53.4	46.5
C52	E.CAP.	43.7	44.9	39.8	38.3	55.9	47.4
C53	E.CAP.	41.1	42.1	37.5	33.8	52.7	43.7
C61	E.CAP.	41.8	38.1	41.9	36.6	53.2	49.4
C62	E.CAP.	37.6	34.7	43.3	33.8	53.1	49.8
D1	BRIDGE DIODE	70.8	67.8	67.4	73.9	62.9	73.9
D51	S.B.D	65.6	66.2	62.9	63.4	72.3	71.3
D52	S.B.D	58.2	63.3	57.5	57.9	69.8	68.0
D61	S.B.D	71.4	68.2	68.2	66.3	75.7	76.7
D62	S.B.D	55.0	52.7	60.2	55.3	66.2	65.6
L1	CHOKE COIL	43.9	39.5	46.6	57.9	34.5	51.2
L2	CHOKE COIL	64.4	65.7	57.9	65.3	63.4	68.0
L3	CHOKE COIL	39.6	41.2	39.1	58.6	31.3	52.4
Q1	MOS FET	73.4	68.5	72.0	72.5	67.3	79.8
Q2	MOS FET	68.0	62.9	66.3	66.1	62.8	74.2
Q3	MOS FET	61.6	56.0	68.2	64.8	59.6	73.8
R116	RESISTOR	68.4	65.0	65.1	70.9	51.8	77.2
T1	TRANS	68.9	65.5	60.8	62.7	70.7	71.6
T2	TRANS	69.2	62.5	71.5	70.1	75.5	76.6

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	8.0A,4.0A,1.0A					

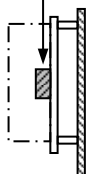
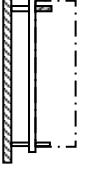
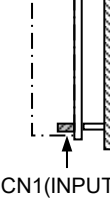
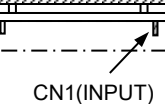
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	44.5	41.0	43.4	49.8	37.4	53.4
A103	IC	45.8	41.2	45.0	49.2	40.3	54.1
A104	IC	41.8	36.4	44.4	47.9	36.7	52.8
A201	IC	48.9	46.2	44.3	42.4	51.1	54.5
A301	IC	52.1	47.3	47.6	46.6	50.6	59.3
C4	Cap., Film	35.3	37.0	33.3	42.6	31.6	40.4
C5	E.CAP.	36.7	33.6	40.5	42.9	32.8	46.3
C51	E.CAP.	38.7	44.3	36.1	36.3	50.0	45.0
C52	E.CAP.	42.7	44.2	39.0	38.0	52.0	45.9
C53	E.CAP.	39.9	41.4	36.7	33.6	48.6	42.3
C61	E.CAP.	41.1	37.6	41.1	36.2	50.0	48.1
C62	E.CAP.	37.2	34.2	42.6	33.6	50.0	48.4
D1	BRIDGE DIODE	39.0	39.0	36.5	46.4	33.5	43.2
D51	S.B.D	64.1	64.9	61.6	62.8	68.0	69.1
D52	S.B.D	57.3	62.2	56.3	57.5	66.0	66.0
D61	S.B.D	70.4	67.3	67.2	65.9	71.8	74.8
D62	S.B.D	54.3	52.1	59.2	55.0	62.3	63.7
L1	CHOKE COIL	18.2	17.6	20.5	36.8	13.2	26.3
L2	CHOKE COIL	38.0	40.5	33.9	43.0	35.5	41.9
L3	CHOKE COIL	22.0	24.0	21.4	37.9	16.7	31.4
Q1	MOS FET	50.3	48.2	49.1	54.1	44.8	56.7
Q2	MOS FET	52.6	50.1	51.0	55.4	47.4	59.1
Q3	MOS FET	50.3	47.0	54.8	56.6	47.9	61.2
R116	RESISTOR	42.2	41.3	39.6	48.5	31.8	49.9
T1	TRANS	63.9	62.0	57.2	60.5	63.0	66.7
T2	TRANS	66.5	61.3	68.6	69.0	70.3	73.1

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	10.0A,3.5A,0.5A					

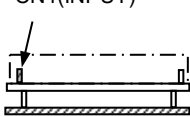
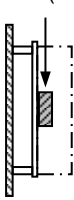
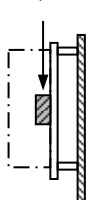
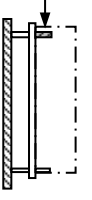
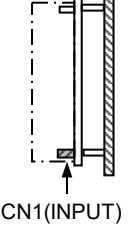
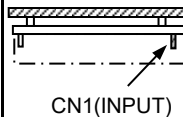
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	57.5	51.7	58.6	60.9	49.1	67.3
A103	IC	55.3	47.8	55.4	55.1	50.5	64.1
A104	IC	49.9	41.9	55.0	53.8	44.3	61.7
A201	IC	53.6	48.1	48.8	47.0	59.5	59.8
A301	IC	54.0	46.9	50.1	48.3	56.3	61.6
C4	Cap., Film	56.5	55.6	55.6	62.9	53.6	61.7
C5	E.CAP.	45.8	40.2	52.8	49.4	41.3	56.0
C51	E.CAP.	42.4	45.2	39.3	40.7	58.3	50.2
C52	E.CAP.	47.1	45.2	42.6	42.4	60.3	51.0
C53	E.CAP.	43.7	41.4	39.7	37.3	55.7	46.9
C61	E.CAP.	40.3	35.8	41.7	36.2	52.0	48.5
C62	E.CAP.	36.8	32.3	42.5	33.4	51.6	48.5
D1	BRIDGE DIODE	68.0	65.8	66.3	74.6	61.6	72.9
D51	S.B.D	69.9	69.7	67.5	69.0	77.8	76.5
D52	S.B.D	62.5	65.8	61.4	63.7	75.1	73.0
D61	S.B.D	68.5	63.6	64.6	65.6	72.7	73.6
D62	S.B.D	52.2	48.7	57.4	53.2	62.2	62.3
L1	CHOKE COIL	41.5	37.8	45.9	58.5	34.0	51.2
L2	CHOKE COIL	64.1	64.7	58.5	67.4	63.1	65.9
L3	CHOKE COIL	37.0	40.4	38.3	60.5	30.3	51.7
Q1	MOS FET	72.5	67.6	71.8	73.6	66.9	79.5
Q2	MOS FET	67.9	62.6	66.8	68.0	63.7	74.6
Q3	MOS FET	60.3	54.5	66.9	64.2	58.1	72.1
R116	RESISTOR	63.2	60.7	61.1	68.4	63.4	51.5
T1	TRANS	74.6	68.9	65.8	70.4	77.7	77.7
T2	TRANS	65.5	57.4	68.4	65.9	68.9	69.6

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	10.0A,3.5A,0.5A					

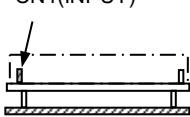
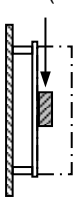
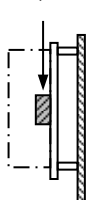
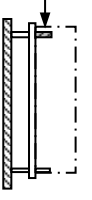
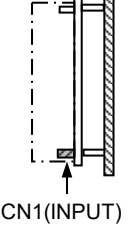
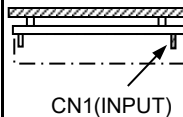
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	43.6	41.0	44.0	50.8	37.0	53.0
A103	IC	45.6	40.7	45.5	49.2	41.0	53.9
A104	IC	40.9	35.7	44.0	47.8	36.3	51.7
A201	IC	51.8	46.9	47.8	46.3	54.8	57.8
A301	IC	51.6	45.7	48.3	47.5	51.6	58.9
C4	Cap., Film	34.0	36.3	33.4	43.9	31.2	40.6
C5	E.CAP.	36.4	33.1	40.8	42.7	32.5	45.7
C51	E.CAP.	41.7	44.6	39.0	40.7	55.1	49.0
C52	E.CAP.	46.2	44.6	42.1	42.1	56.6	49.7
C53	E.CAP.	42.8	40.9	39.2	36.6	51.9	45.6
C61	E.CAP.	39.7	35.4	41.1	35.9	49.1	47.3
C62	E.CAP.	36.4	31.9	42.0	33.2	48.8	47.3
D1	BRIDGE DIODE	37.1	37.8	36.4	47.5	32.9	43.2
D51	S.B.D	68.6	68.5	66.6	68.4	73.8	74.5
D52	S.B.D	61.7	64.9	60.9	63.3	71.4	71.2
D61	S.B.D	67.5	62.9	63.6	65.0	69.0	71.6
D62	S.B.D	51.3	48.2	56.5	52.8	58.7	60.7
L1	CHOKE COIL	16.6	16.6	20.6	37.5	13.1	27.0
L2	CHOKE COIL	38.5	40.1	34.8	45.3	36.2	41.6
L3	CHOKE COIL	20.1	23.4	21.5	39.4	16.4	31.4
Q1	MOS FET	49.9	47.6	49.4	55.1	45.0	57.1
Q2	MOS FET	53.1	50.1	52.1	57.2	48.6	59.8
Q3	MOS FET	49.3	45.7	53.9	56.1	46.8	59.8
R116	RESISTOR	39.2	39.0	38.0	47.8	38.4	40.8
T1	TRANS	70.1	65.6	62.5	68.2	70.4	73.0
T2	TRANS	62.3	55.8	65.5	64.5	64.1	66.1

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	12.0A,2.8A,0.5A					

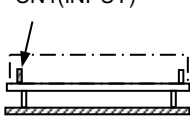
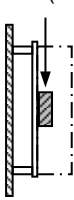
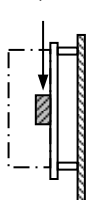
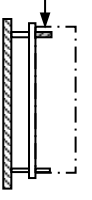
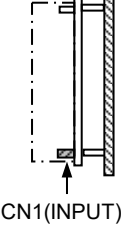
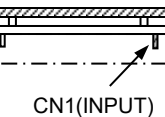
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	61.7	53.0	61.0	62.7	52.1	70.9
A103	IC	59.1	49.8	59.3	58.0	52.6	67.8
A104	IC	52.4	43.0	58.1	54.9	46.0	64.4
A201	IC	60.5	54.1	55.5	52.2	65.4	66.4
A301	IC	57.6	49.4	55.1	49.9	58.3	65.0
C4	Cap., Film	61.7	59.2	58.7	65.7	57.1	65.1
C5	E.CAP.	47.9	41.7	55.7	50.5	43.3	58.8
C51	E.CAP.	49.3	53.8	46.0	46.2	64.2	56.5
C52	E.CAP.	54.2	53.0	49.7	48.0	66.8	57.0
C53	E.CAP.	50.1	48.4	46.1	41.6	61.9	52.0
C61	E.CAP.	42.7	37.9	45.1	37.5	54.5	50.5
C62	E.CAP.	37.8	34.2	45.7	34.0	53.6	50.3
D1	BRIDGE DIODE	73.7	69.8	69.7	77.3	65.2	76.6
D51	S.B.D	79.8	78.2	76.5	77.5	86.1	84.8
D52	S.B.D	70.4	75.2	69.8	70.9	83.0	81.0
D61	S.B.D	69.7	65.6	68.7	64.7	74.2	75.2
D62	S.B.D	54.6	51.4	61.2	54.9	65.2	64.6
L1	CHOKE COIL	46.6	41.4	49.1	60.9	36.5	54.9
L2	CHOKE COIL	70.2	70.2	63.0	71.9	68.1	73.6
L3	CHOKE COIL	41.4	42.7	40.5	61.7	32.4	54.6
Q1	MOS FET	77.4	71.5	76.3	76.9	70.4	84.1
Q2	MOS FET	73.8	67.0	72.3	72.2	67.6	79.8
Q3	MOS FET	62.5	56.2	70.4	65.5	60.4	74.9
R116	RESISTOR	72.6	67.9	69.9	76.2	54.4	80.6
T1	TRANS	85.8	79.6	77.6	80.4	87.6	88.0
T2	TRANS	60.8	53.7	65.9	62.0	67.2	68.1

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-522

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+12VDC,-12VDC					
出力電流 I_o Output Current	12.0A,2.8A,0.5A					

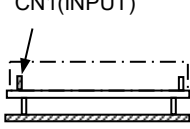
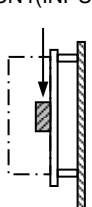
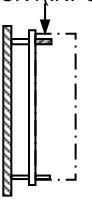
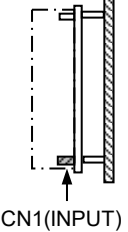
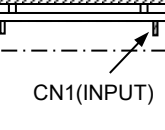
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	46.6	41.7	45.7	52.0	38.6	55.5
A103	IC	48.5	42.3	48.6	51.6	42.3	56.8
A104	IC	42.8	36.3	46.2	48.6	37.3	53.5
A201	IC	58.7	52.8	54.0	51.2	60.3	64.2
A301	IC	55.0	47.8	52.9	48.9	53.0	61.8
C4	Cap., Film	37.5	38.7	35.3	45.6	33.1	42.8
C5	E.CAP.	37.8	34.1	42.6	43.6	33.7	47.8
C51	E.CAP.	48.7	53.1	45.4	45.7	60.8	55.1
C52	E.CAP.	53.4	52.1	48.8	47.4	62.9	55.5
C53	E.CAP.	49.2	47.6	45.4	41.1	57.8	50.7
C61	E.CAP.	42.1	37.3	44.3	37.3	51.2	49.2
C62	E.CAP.	37.2	33.5	44.8	34.0	50.4	48.9
D1	BRIDGE DIODE	40.8	40.2	38.1	49.0	34.9	45.4
D51	S.B.D	78.6	76.8	75.1	76.7	81.5	82.6
D52	S.B.D	69.6	74.1	68.9	70.3	79.2	79.2
D61	S.B.D	68.6	64.7	67.4	64.1	70.1	73.2
D62	S.B.D	53.9	50.6	59.9	54.3	61.3	62.7
L1	CHOKE COIL	19.1	18.1	21.6	38.1	13.6	28.6
L2	CHOKE COIL	42.2	43.5	37.4	48.0	38.8	46.2
L3	CHOKE COIL	23.0	24.7	22.5	39.9	17.5	33.0
Q1	MOS FET	53.1	50.0	52.2	57.0	46.9	59.9
Q2	MOS FET	57.5	53.6	56.2	60.6	51.4	63.7
Q3	MOS FET	50.8	46.6	56.4	56.7	48.0	61.6
R116	RESISTOR	45.2	42.9	43.6	52.7	33.5	52.6
T1	TRANS	81.7	75.9	74.0	77.5	79.6	82.9
T2	TRANS	58.0	51.9	62.9	60.5	61.6	64.3

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	8.0A,3.0A,1.0A					

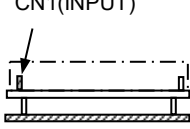
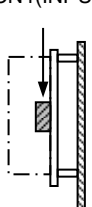
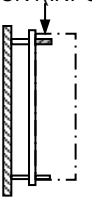
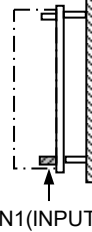
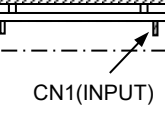
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	55.1	51.5	57.9	59.0	48.6	66.9
A103	IC	53.8	49.6	55.8	55.1	48.9	64.0
A104	IC	48.7	42.3	55.1	53.3	43.2	61.4
A201	IC	44.6	46.2	44.0	41.6	52.0	51.4
A301	IC	50.2	50.5	50.2	48.4	55.9	57.6
C4	Cap., Film	53.2	56.2	53.4	61.3	51.9	60.2
C5	E.CAP.	46.9	42.7	53.8	50.8	42.4	58.5
C51	E.CAP.	32.5	40.7	32.2	32.4	47.5	39.3
C52	E.CAP.	36.3	41.3	35.6	35.1	51.2	41.8
C53	E.CAP.	34.4	39.1	34.6	33.2	48.7	40.1
C61	E.CAP.	34.5	34.1	37.7	33.3	47.5	42.2
C62	E.CAP.	32.2	31.7	38.7	32.1	47.8	42.7
D1	BRIDGE DIODE	65.9	67.6	67.4	75.3	61.3	73.3
D51	S.B.D	58.1	60.9	57.2	59.0	66.8	64.7
D52	S.B.D	55.2	61.3	56.0	56.6	66.6	63.1
D61	S.B.D	60.2	60.7	60.1	60.8	67.4	67.0
D62	S.B.D	48.8	49.7	55.1	51.6	61.1	58.7
L1	CHOKE COIL	37.9	39.0	45.4	57.2	32.5	52.4
L2	CHOKE COIL	58.9	62.8	54.7	62.7	59.7	64.2
L3	CHOKE COIL	33.5	41.2	38.7	57.9	29.0	50.1
Q1	MOS FET	69.8	68.6	70.9	72.2	66.0	79.1
Q2	MOS FET	65.6	63.3	66.4	66.4	61.9	74.3
Q3	MOS FET	60.8	57.5	68.8	66.1	59.7	75.0
R116	RESISTOR	63.9	63.6	64.0	69.2	59.5	74.3
T1	TRANS	63.0	63.5	57.7	61.1	67.8	67.2
T2	TRANS	72.2	68.8	75.9	75.7	80.9	80.5

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	8.0A,3.0A,1.0A					

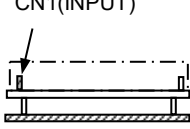
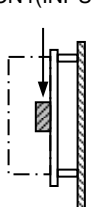
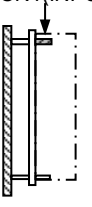
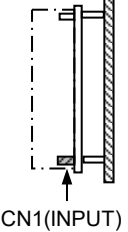
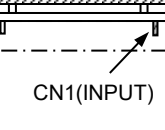
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	41.0	40.3	42.6	48.4	36.0	52.2
A103	IC	43.5	41.7	45.0	48.4	39.3	53.1
A104	IC	39.5	35.4	43.5	46.6	35.1	51.1
A201	IC	43.0	44.2	42.2	40.5	47.3	49.3
A301	IC	47.9	48.2	47.6	47.1	51.2	55.0
C4	Cap., Film	31.2	36.6	31.8	41.4	29.6	39.4
C5	E.CAP.	36.9	34.9	41.1	43.7	33.2	47.4
C51	E.CAP.	32.3	39.2	31.2	32.0	44.3	38.6
C52	E.CAP.	35.7	39.9	34.6	34.5	47.6	40.7
C53	E.CAP.	33.8	37.8	33.7	32.7	45.2	39.4
C61	E.CAP.	34.1	33.0	36.6	33.0	44.6	41.3
C62	E.CAP.	31.9	30.6	37.8	31.7	45.0	41.8
D1	BRIDGE DIODE	34.9	38.5	36.3	46.3	32.2	43.3
D51	S.B.D	56.7	58.9	55.6	57.9	62.1	62.7
D52	S.B.D	54.3	59.5	54.8	55.9	62.8	61.7
D61	S.B.D	59.5	59.2	58.9	60.0	63.6	65.4
D62	S.B.D	48.3	48.3	53.8	51.0	57.6	57.3
L1	CHOKE COIL	14.2	17.4	20.0	36.3	12.3	28.1
L2	CHOKE COIL	34.0	38.6	31.8	40.8	33.4	40.0
L3	CHOKE COIL	17.3	23.7	21.0	36.7	15.0	30.5
Q1	MOS FET	46.9	47.8	47.9	52.9	43.7	56.1
Q2	MOS FET	49.9	49.4	50.2	54.4	46.2	58.1
Q3	MOS FET	49.2	47.6	54.7	56.9	47.8	61.4
R116	RESISTOR	38.2	39.8	38.4	46.5	34.7	48.0
T1	TRANS	58.5	59.5	54.1	58.2	60.2	62.6
T2	TRANS	69.9	66.4	72.8	74.2	75.9	77.2

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	10.0A,2.8A,0.5A					

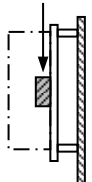
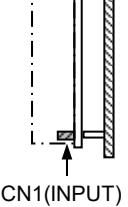
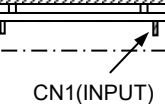
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	56.1	52.2	58.2	59.6	49.3	67.5
A103	IC	55.2	50.6	57.0	55.4	50.0	65.3
A104	IC	48.9	42.6	55.2	52.9	43.5	62.6
A201	IC	49.8	50.4	47.7	45.7	56.3	57.0
A301	IC	52.7	52.2	52.3	49.4	58.1	60.5
C4	Cap., Film	54.4	56.7	53.4	61.3	52.1	60.7
C5	E.CAP.	47.4	43.0	54.0	50.6	42.7	59.1
C51	E.CAP.	38.3	45.5	35.8	36.4	53.1	45.4
C52	E.CAP.	42.1	45.6	39.7	38.9	56.5	47.6
C53	E.CAP.	39.4	42.9	38.4	36.1	53.4	45.5
C61	E.CAP.	36.1	35.7	39.4	33.8	49.0	45.1
C62	E.CAP.	33.3	33.2	40.0	32.1	48.9	45.3
D1	BRIDGE DIODE	66.4	67.7	67.6	75.4	61.2	73.9
D51	S.B.D	67.1	69.6	65.6	66.2	75.1	72.6
D52	S.B.D	62.1	67.7	62.1	62.3	73.0	70.5
D61	S.B.D	61.8	61.8	61.8	60.7	68.2	68.4
D62	S.B.D	48.9	49.4	54.7	50.1	60.3	58.9
L1	CHOKE COIL	39.1	39.7	46.1	57.5	33.1	53.5
L2	CHOKE COIL	61.2	64.2	56.2	63.6	60.9	65.9
L3	CHOKE COIL	34.1	41.4	38.9	57.7	30.2	50.6
Q1	MOS FET	71.6	69.4	71.9	72.9	66.9	80.0
Q2	MOS FET	68.1	64.8	67.8	67.6	63.3	75.9
Q3	MOS FET	61.7	57.6	68.4	65.3	59.6	74.4
R116	RESISTOR	65.7	64.7	64.8	69.9	60.5	75.7
T1	TRANS	71.9	70.8	65.2	68.1	75.3	75.0
T2	TRANS	70.1	66.9	74.9	72.6	78.2	78.5

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	10.0A,2.8A,0.5A					

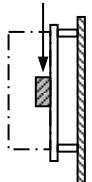
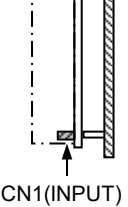
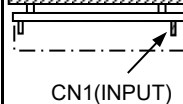
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	42.1	41.1	43.6	49.4	36.8	53.0
A103	IC	45.0	42.8	46.5	49.2	40.3	54.6
A104	IC	39.8	36.0	44.1	46.9	35.5	51.9
A201	IC	48.2	48.8	46.5	45.2	51.8	54.5
A301	IC	50.4	50.3	50.4	48.7	53.3	57.5
C4	Cap., Film	32.5	37.1	32.2	41.8	30.1	40.0
C5	E.CAP.	37.2	35.2	41.6	43.8	33.5	47.9
C51	E.CAP.	37.7	44.3	35.4	36.4	49.8	43.8
C52	E.CAP.	41.3	44.6	39.1	38.8	53.0	45.9
C53	E.CAP.	38.8	41.9	37.9	36.1	49.8	44.0
C61	E.CAP.	35.6	34.9	38.7	33.9	46.1	43.8
C62	E.CAP.	33.0	32.4	39.4	32.3	46.1	44.0
D1	BRIDGE DIODE	35.6	38.7	36.8	46.8	32.6	43.4
D51	S.B.D	65.8	67.9	64.6	65.6	71.0	70.4
D52	S.B.D	61.1	66.3	61.2	61.8	69.2	68.6
D61	S.B.D	60.8	60.5	60.8	60.4	64.5	66.5
D62	S.B.D	48.1	48.3	53.9	50.0	56.9	57.0
L1	CHOKE COIL	14.9	17.7	20.5	36.6	12.8	28.7
L2	CHOKE COIL	36.3	39.9	33.3	42.1	34.5	41.5
L3	CHOKE COIL	18.1	23.9	21.4	36.7	16.2	30.5
Q1	MOS FET	48.6	48.5	49.1	53.8	44.6	56.9
Q2	MOS FET	51.8	51.1	52.0	56.0	47.7	59.9
Q3	MOS FET	49.9	47.8	54.8	56.5	47.7	61.1
R116	RESISTOR	40.0	41.0	39.7	47.7	35.8	49.3
T1	TRANS	67.5	66.9	61.8	65.7	67.8	70.3
T2	TRANS	67.6	64.7	72.0	71.5	73.3	74.8

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	100VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	12.0A,2.2A,0.5A					

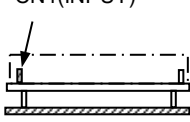
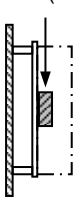
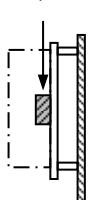
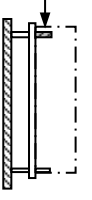
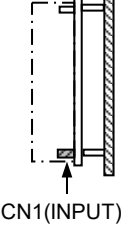
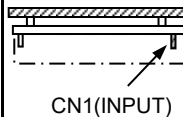
(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	56.6	52.1	59.8	61.3	49.8	67.4
A103	IC	56.1	50.4	58.7	57.5	50.6	65.5
A104	IC	49.1	42.0	56.2	53.6	43.3	61.6
A201	IC	53.7	53.0	53.3	50.3	60.8	61.2
A301	IC	53.1	51.8	55.2	51.4	58.8	61.2
C4	Cap., Film	54.9	57.0	54.9	64.8	53.4	59.8
C5	E.CAP.	47.5	42.5	55.3	51.6	42.7	58.5
C51	E.CAP.	41.7	49.2	39.9	40.9	57.0	48.2
C52	E.CAP.	45.8	49.0	44.4	44.0	61.3	51.1
C53	E.CAP.	42.6	45.6	42.9	40.9	57.6	48.7
C61	E.CAP.	35.8	35.1	41.1	34.8	48.9	44.7
C62	E.CAP.	32.9	32.2	41.2	32.8	48.5	44.6
D1	BRIDGE DIODE	66.7	67.9	68.5	78.4	62.7	73.5
D51	S.B.D	72.0	71.7	70.6	73.5	80.2	78.5
D52	S.B.D	67.9	73.4	68.9	70.1	79.8	76.5
D61	S.B.D	59.9	59.6	61.7	61.0	67.0	67.1
D62	S.B.D	48.5	49.0	56.3	52.0	60.6	59.0
L1	CHOKE COIL	38.8	39.8	46.4	59.4	33.8	50.2
L2	CHOKE COIL	62.8	65.4	58.0	68.3	62.9	66.2
L3	CHOKE COIL	34.1	41.3	39.3	60.4	29.8	50.2
Q1	MOS FET	72.5	70.0	73.6	75.6	68.0	79.8
Q2	MOS FET	69.2	65.8	70.3	71.1	64.9	76.6
Q3	MOS FET	60.3	56.3	68.7	65.6	58.8	73.0
R116	RESISTOR	66.2	65.1	66.4	73.0	61.5	76.0
T1	TRANS	80.2	77.3	73.7	78.4	83.8	82.9
T2	TRANS	64.7	61.1	71.4	69.3	73.6	74.2

3. 主要部品温度上昇値 Main Components Temperature Rise ΔT List

MODEL : CUT100-5FF

(1) 測定条件 Measuring Conditions

取付方法 Mounting Method (標準取付 : B) (Standard Mounting : B)	Mounting A	Mounting B (STANDARD MOUNTING) CN1(INPUT)	Mounting C	Mounting D	Mounting E	Mounting F
						
入力電圧 V_{in} Input Voltage	230VAC					
出力電圧 V_o Output Voltage	5VDC,+15VDC,-15VDC					
出力電流 I_o Output Current	12.0A,2.2A,0.5A					

(2) 測定結果 Measuring Results

出力ディレーティング Output Derating		ΔT Temperature Rise ($^{\circ}\text{C}$)					
		$I_o=100\%$					
		$T_a=40^{\circ}\text{C}$	$T_a=45^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=40^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$	$T_a=35^{\circ}\text{C}$
部品番号 Location No.	部品名 Part name	取付方向 Mounting A	取付方向 Mounting B	取付方向 Mounting C	取付方向 Mounting D	取付方向 Mounting E	取付方向 Mounting F
A101	IC	42.1	40.7	44.4	50.8	36.9	52.7
A103	IC	45.4	42.3	47.9	51.0	40.6	54.7
A104	IC	39.7	35.2	44.6	47.2	35.1	50.9
A201	IC	52.1	51.3	51.8	49.8	55.9	58.5
A301	IC	50.9	49.8	52.9	50.6	53.8	58.2
C4	Cap., Film	32.5	37.2	33.1	44.9	30.6	39.2
C5	E.CAP.	37.2	34.6	42.4	44.7	33.4	47.5
C51	E.CAP.	41.3	48.0	39.3	40.7	53.8	47.3
C52	E.CAP.	45.1	47.8	43.5	43.9	57.7	50.0
C53	E.CAP.	42.1	44.5	42.1	40.7	53.8	47.7
C61	E.CAP.	35.4	34.0	40.2	34.6	46.1	43.6
C62	E.CAP.	32.5	31.3	40.4	32.6	45.8	43.5
D1	BRIDGE DIODE	35.5	38.8	37.3	49.5	33.0	42.9
D51	S.B.D	70.4	69.8	69.1	72.7	75.5	76.2
D52	S.B.D	66.9	71.9	67.9	69.6	75.9	74.9
D61	S.B.D	58.9	58.4	60.4	60.5	63.1	65.3
D62	S.B.D	47.8	47.8	55.1	51.6	57.1	57.4
L1	CHOKE COIL	14.5	17.6	20.4	38.3	12.6	26.3
L2	CHOKE COIL	37.2	40.5	34.4	45.8	35.7	41.6
L3	CHOKE COIL	17.7	23.6	21.4	39.3	15.6	30.1
Q1	MOS FET	48.8	48.7	49.9	56.2	45.0	56.5
Q2	MOS FET	52.9	51.7	53.9	59.0	48.8	60.4
Q3	MOS FET	48.4	46.1	54.6	56.5	46.7	59.6
R116	RESISTOR	39.9	40.8	40.5	50.0	36.1	49.3
T1	TRANS	75.5	73.3	70.2	75.9	76.3	78.3
T2	TRANS	62.2	58.9	68.2	68.0	68.4	70.7

4. 電解コンデンサ推定寿命計算値

Electrolytic Capacitor Lifetime

MODEL : CUT100-522

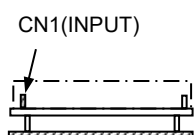
Output : 5V/10A; +12V/3.5A; -12V/0.5A

空冷条件：自然空冷

Cooling condition : Convection cooling

取付方向 A

Mounting A



Conditions

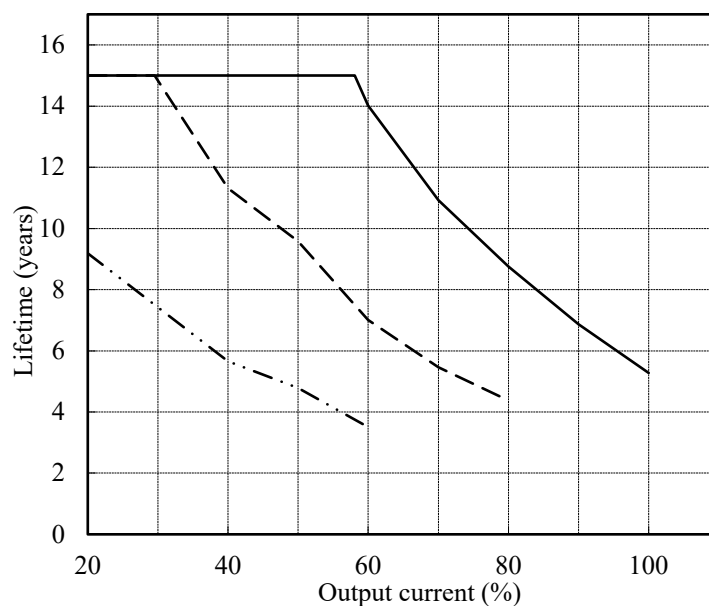
Ta 40°C : _____

50°C : — — —

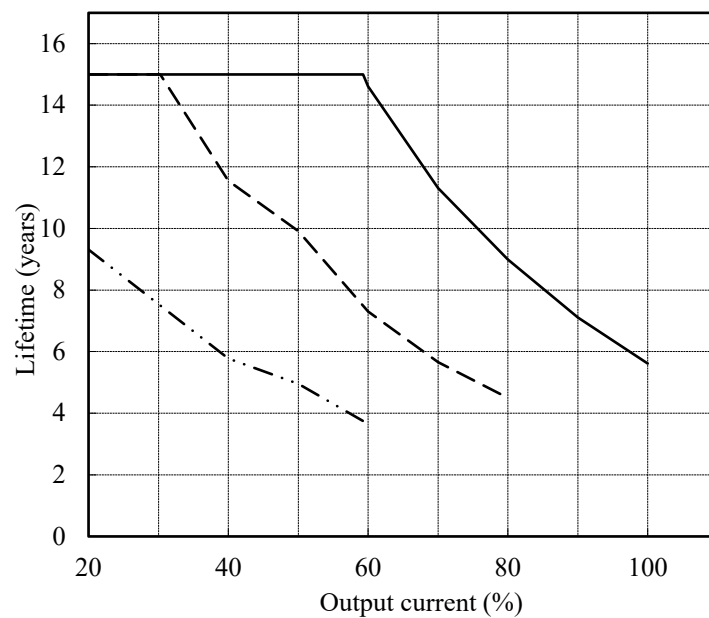
60°C : — . . —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	9.2
40	15.0	11.3	5.7
50	15.0	9.6	4.8
60	14.0	7.0	3.5
70	10.9	5.5	-
80	8.8	4.4	-
90	6.9	-	-
100	5.3	-	-


$$V_{in}=230VAC$$

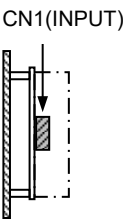
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.3
40	15.0	11.5	5.8
50	15.0	9.9	5.0
60	14.6	7.3	3.7
70	11.3	5.7	-
80	9.0	4.5	-
90	7.1	-	-
100	5.6	-	-



MODEL : CUT100-522

Output : 5V/10A; +12V/3.5A; -12V/0.5A

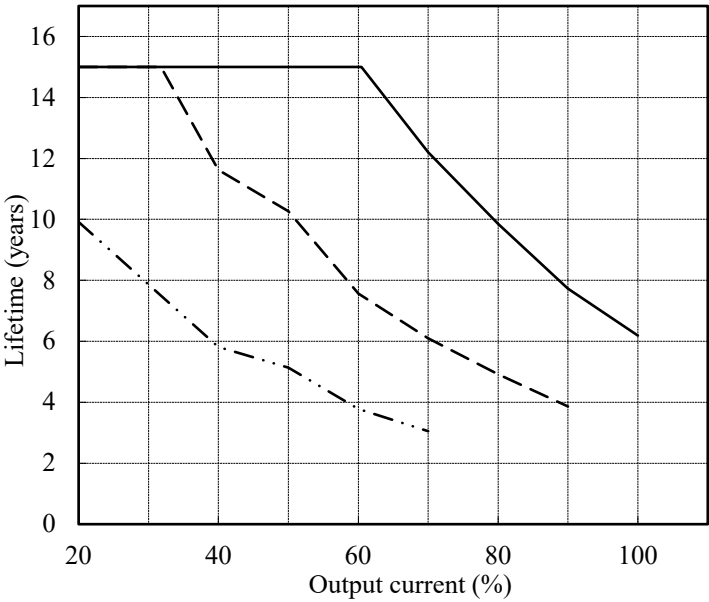
取付方向 B
Mounting B



Vin=100VAC

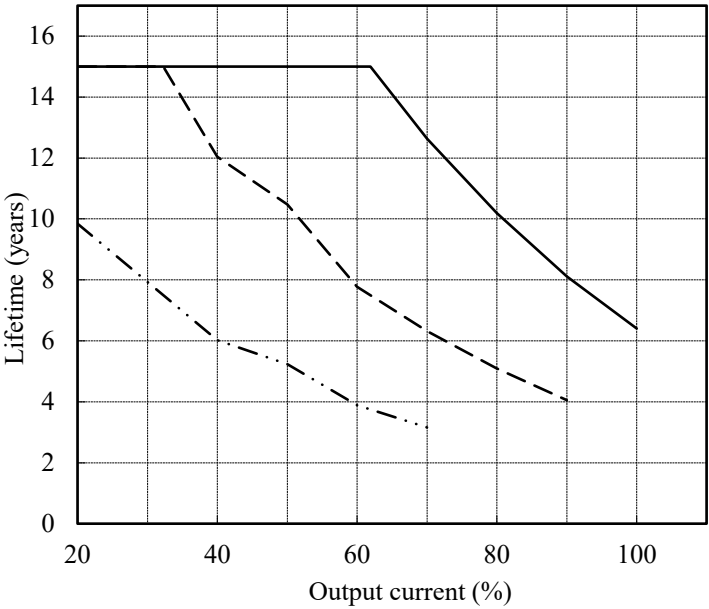
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.9
40	15.0	11.6	5.8
50	15.0	10.3	5.1
60	15.0	7.6	3.8
70	12.2	6.1	3.1
80	9.8	4.9	-
90	7.7	3.9	-
100	6.2	-	-

Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - ·



Vin=230VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.8
40	15.0	12.0	6.0
50	15.0	10.5	5.2
60	15.0	7.8	3.9
70	12.6	6.3	3.2
80	10.2	5.1	-
90	8.1	4.1	-
100	6.4	-	-

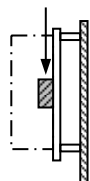


MODEL : CUT100-522

Output : 5V/10A; +12V/3.5A; -12V/0.5A

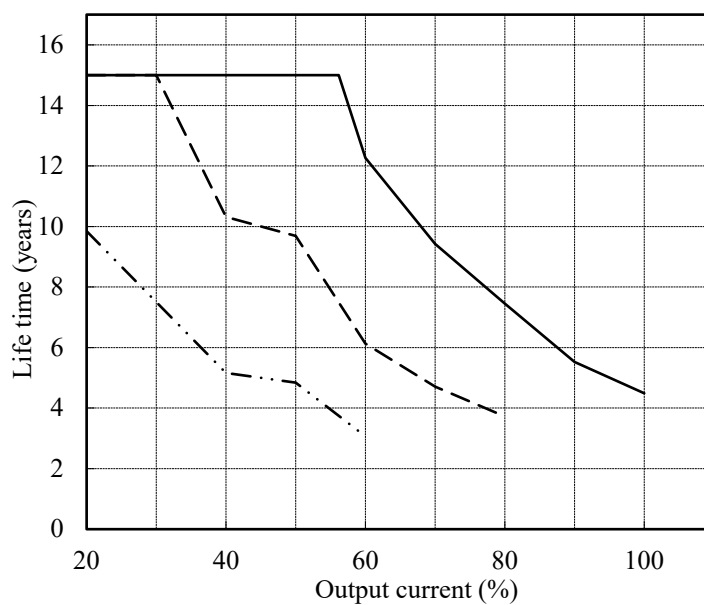
取付方向 C
Mounting C

CN1(INPUT)


$$V_{in}=100V_{AC}$$

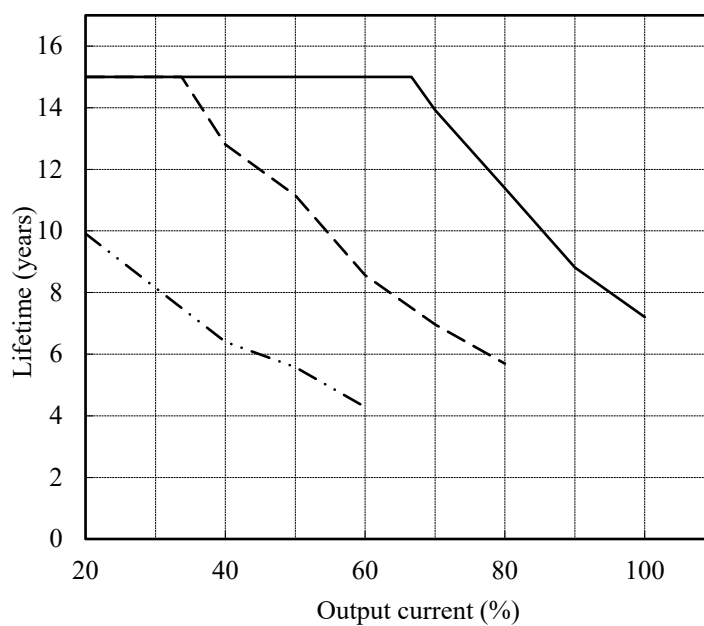
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.8
40	15.0	10.3	5.2
50	15.0	9.7	4.8
60	12.3	6.1	3.1
70	9.4	4.7	-
80	7.4	3.7	-
90	5.5	-	-
100	4.5	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



V_{in}=230VAC

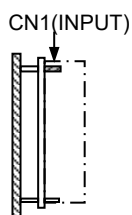
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.9
40	15.0	12.8	6.4
50	15.0	11.2	5.6
60	15.0	8.6	4.3
70	13.9	7.0	-
80	11.4	5.7	-
90	8.8	-	-
100	7.2	-	-



MODEL : CUT100-522

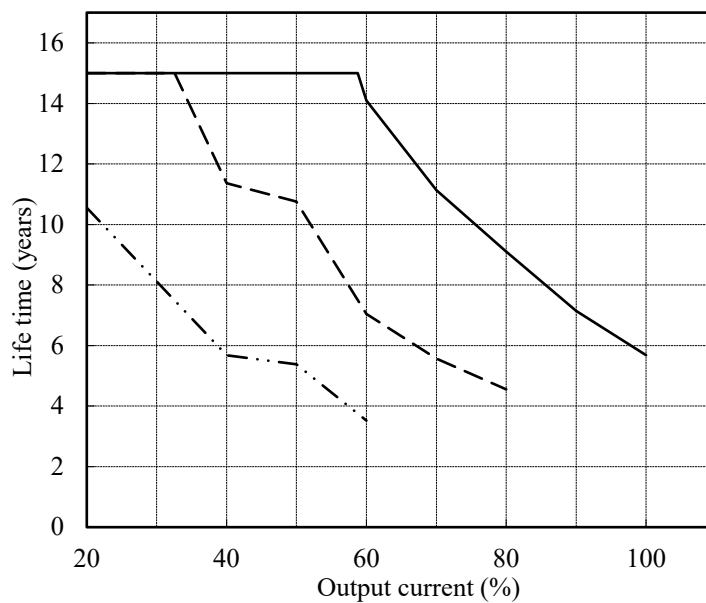
Output : 5V/10A; +12V/3.5A; -12V/0.5A

取付方向 D
Mounting D

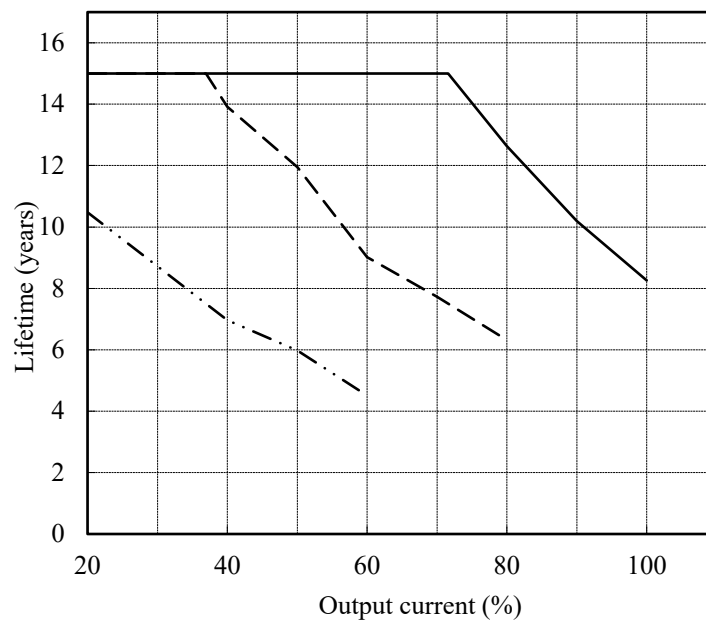

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	10.6
40	15.0	11.4	5.7
50	15.0	10.8	5.4
60	14.1	7.0	3.5
70	11.1	5.6	-
80	9.1	4.6	-
90	7.1	-	-
100	5.7	-	-

Conditions	Ta	40°C : ———
		50°C : — — —
		60°C : — · · —


$$V_{in}=230VAC$$

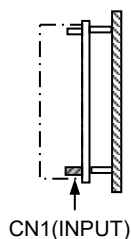
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	10.5
40	15.0	13.9	7.0
50	15.0	12.0	6.0
60	15.0	9.0	4.5
70	15.0	7.7	-
80	12.6	6.3	-
90	10.2	-	-
100	8.3	-	-



MODEL : CUT100-522

Output : 5V/10A; +12V/3.5A; -12V/0.5A

取付方向 E
Mounting E

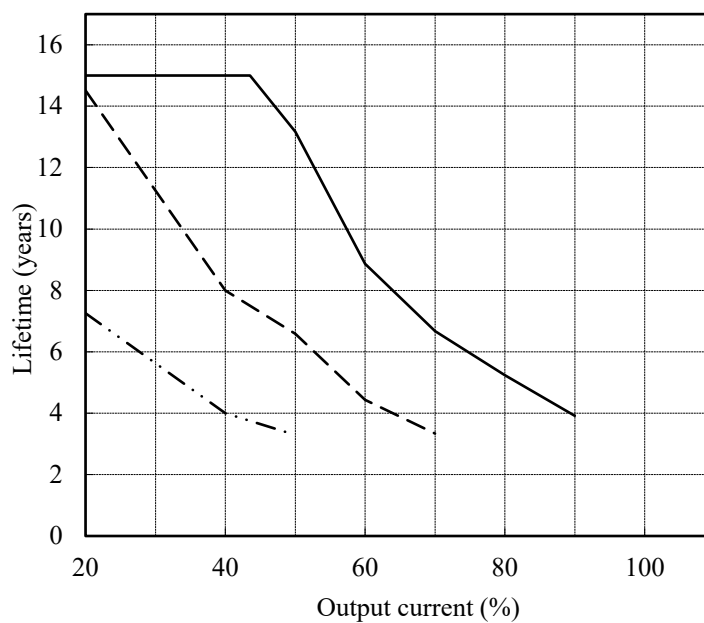
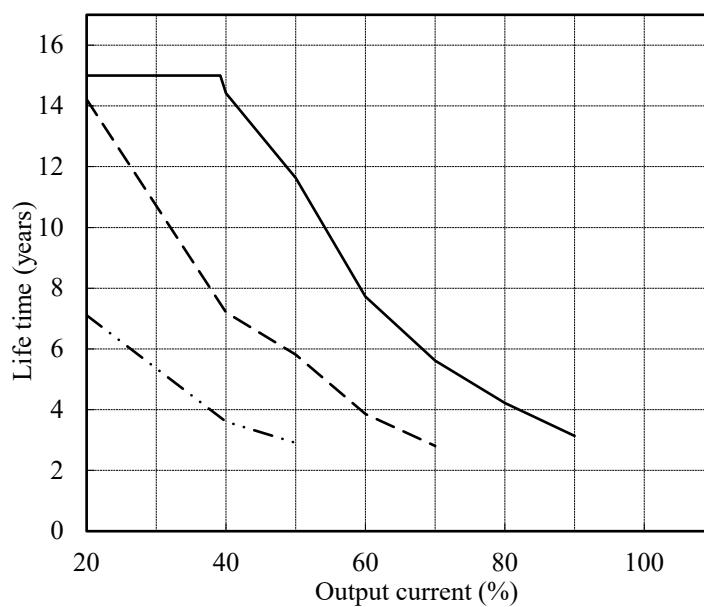

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	14.2	7.1
40	14.4	7.2	3.6
50	11.6	5.8	2.9
60	7.7	3.9	-
70	5.6	2.8	-
80	4.2	-	-
90	3.1	-	-
100	-	-	-

V_{in}=230VAC

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	14.5	7.3
40	15.0	8.0	4.0
50	13.2	6.6	3.3
60	8.9	4.4	-
70	6.7	3.3	-
80	5.2	-	-
90	3.9	-	-
100	-	-	-

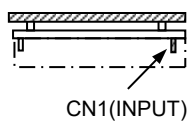
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



MODEL : CUT100-522

Output : 5V/10A; +12V/3.5A; -12V/0.5A

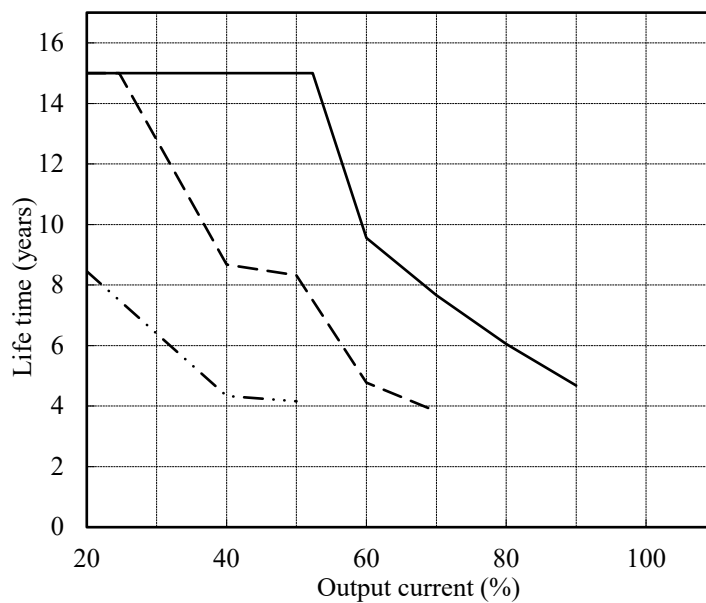
取付方向 F
Mounting F



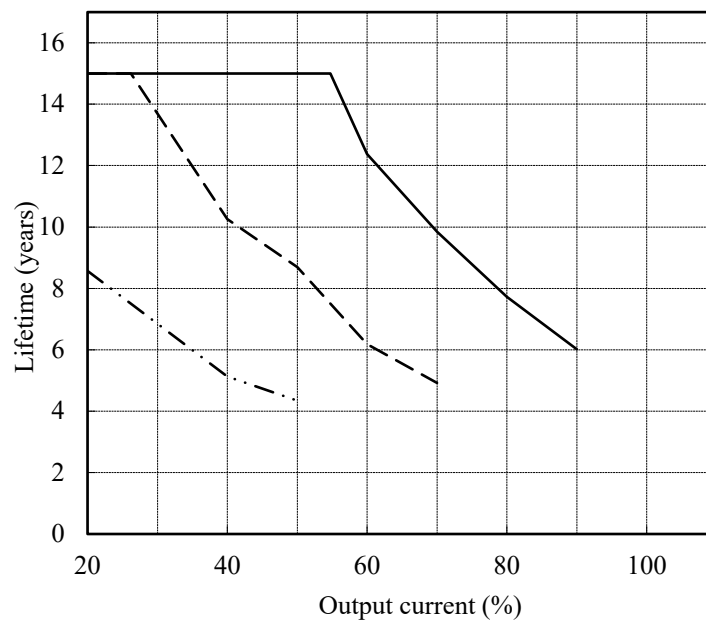
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.5
40	15.0	8.7	4.3
50	15.0	8.3	4.2
60	9.6	4.8	-
70	7.7	3.8	-
80	6.0	-	-
90	4.7	-	-
100	-	-	-

 $V_{in}=230VAC$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.6
40	15.0	10.3	5.1
50	15.0	8.7	4.3
60	12.4	6.2	-
70	9.8	4.9	-
80	7.7	-	-
90	6.0	-	-
100	-	-	-



4. 電解コンデンサ推定寿命計算値

Electrolytic Capacitor Lifetime

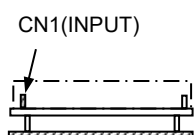
MODEL : CUT100-522

Output : 5V/12A; +12V/2.8A; -12V/0.5A

空冷条件：自然空冷

Cooling condition : Convection cooling

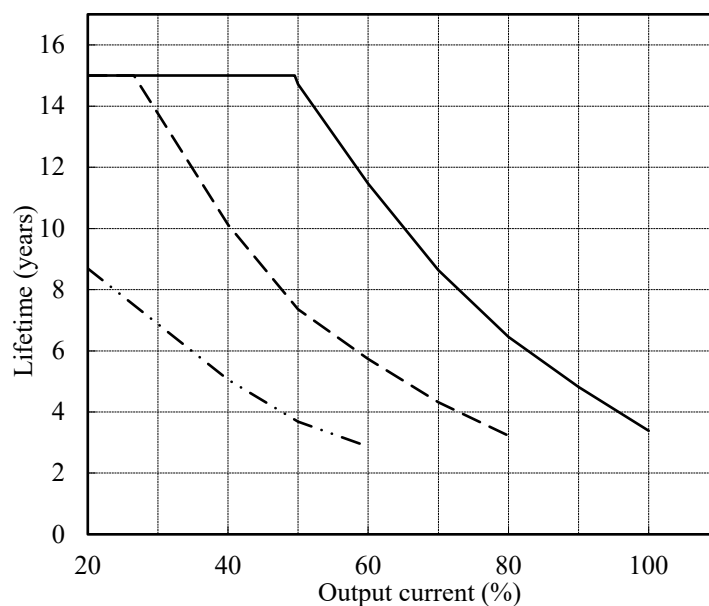
取付方向 A
Mounting A



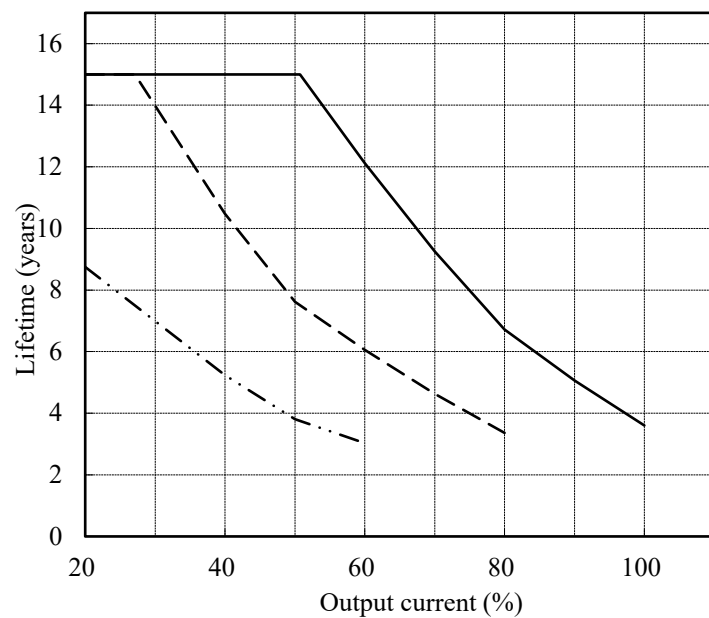
Conditions Ta 40°C : _____
 50°C : - - - -
 60°C : - · - -

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	8.7
40	15.0	10.1	5.1
50	14.7	7.4	3.7
60	11.5	5.7	2.9
70	8.6	4.3	-
80	6.5	3.2	-
90	4.8	-	-
100	3.4	-	-


$$V_{in}=230VAC$$

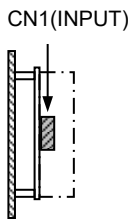
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.7
40	15.0	10.5	5.2
50	15.0	7.6	3.8
60	12.1	6.1	3.0
70	9.2	4.6	-
80	6.7	3.4	-
90	5.1	-	-
100	3.6	-	-



MODEL : CUT100-522

Output : 5V/12A; +12V/2.8A; -12V/0.5A

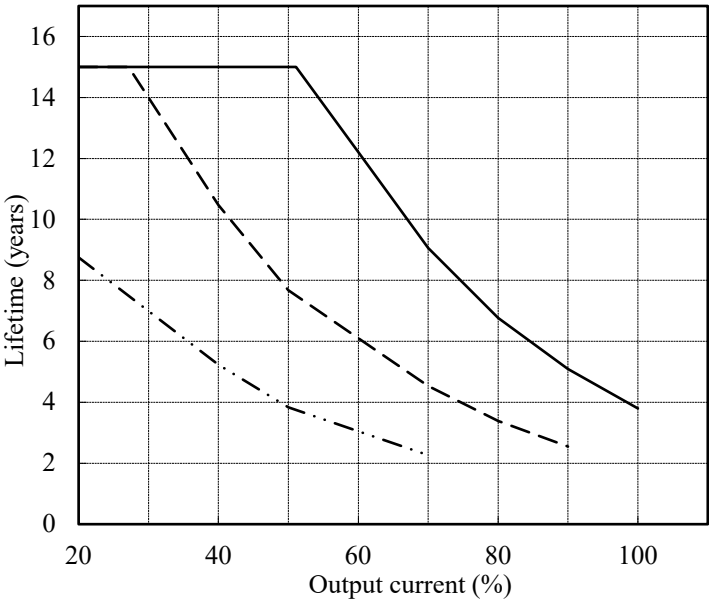
取付方向 B
Mounting B



Vin=100VAC

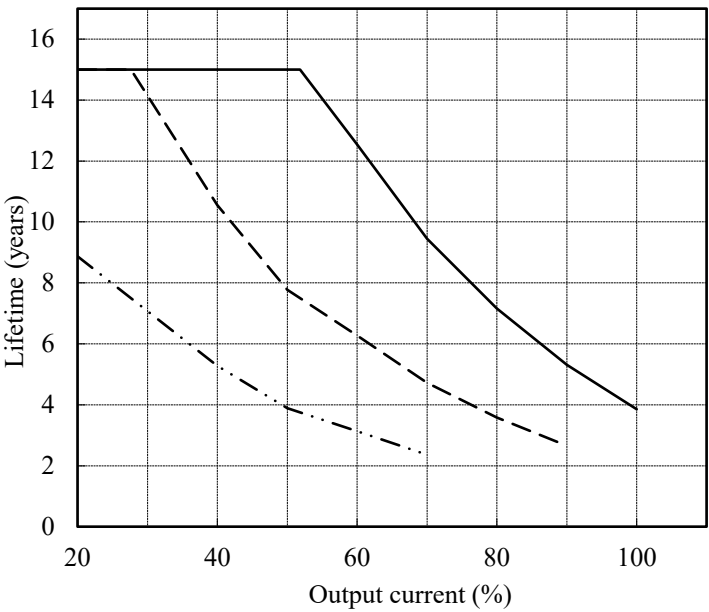
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	8.8
40	15.0	10.5	5.2
50	15.0	7.7	3.8
60	12.2	6.1	3.1
70	9.1	4.5	2.3
80	6.8	3.4	-
90	5.1	2.5	-
100	3.8	-	-

Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - ·



Vin=230VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	8.9
40	15.0	10.6	5.3
50	15.0	7.8	3.9
60	12.5	6.3	3.1
70	9.4	4.7	2.4
80	7.2	3.6	-
90	5.3	2.7	-
100	3.9	-	-

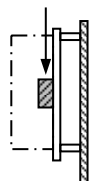


MODEL : CUT100-522

Output : 5V/12A; +12V/2.8A; -12V/0.5A

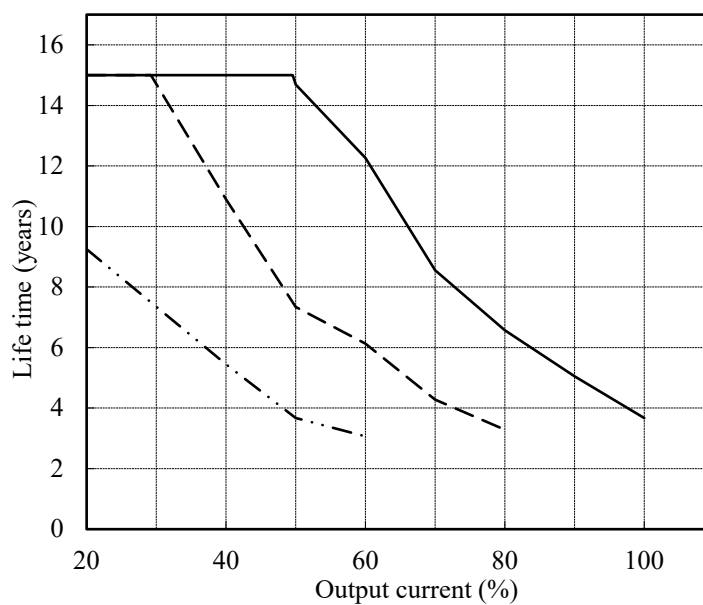
取付方向 C
Mounting C

CN1(INPUT)


$$V_{in}=100V_{AC}$$

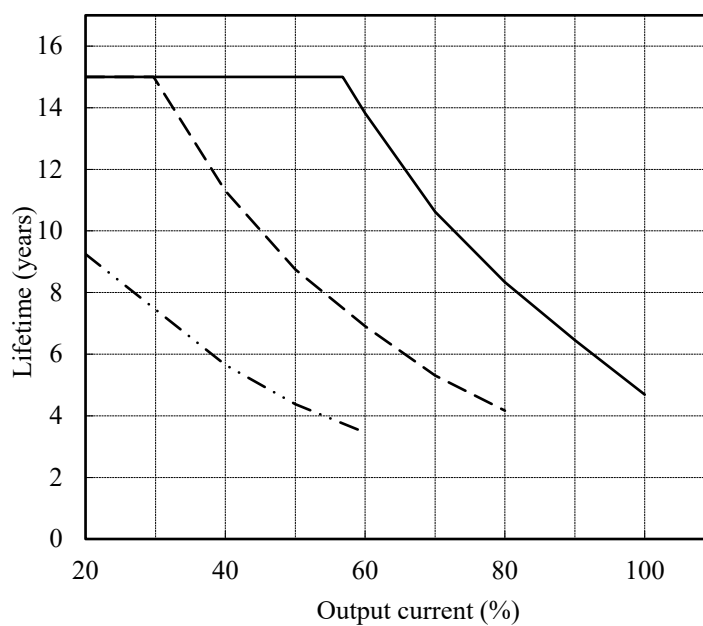
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.2
40	15.0	10.9	5.5
50	14.7	7.3	3.7
60	12.3	6.1	3.1
70	8.6	4.3	-
80	6.6	3.3	-
90	5.1	-	-
100	3.7	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



V_{in}=230VAC

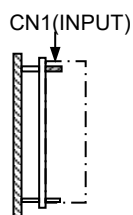
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.2
40	15.0	11.3	5.7
50	15.0	8.7	4.4
60	13.8	6.9	3.5
70	10.6	5.3	-
80	8.3	4.2	-
90	6.4	-	-
100	4.7	-	-



MODEL : CUT100-522

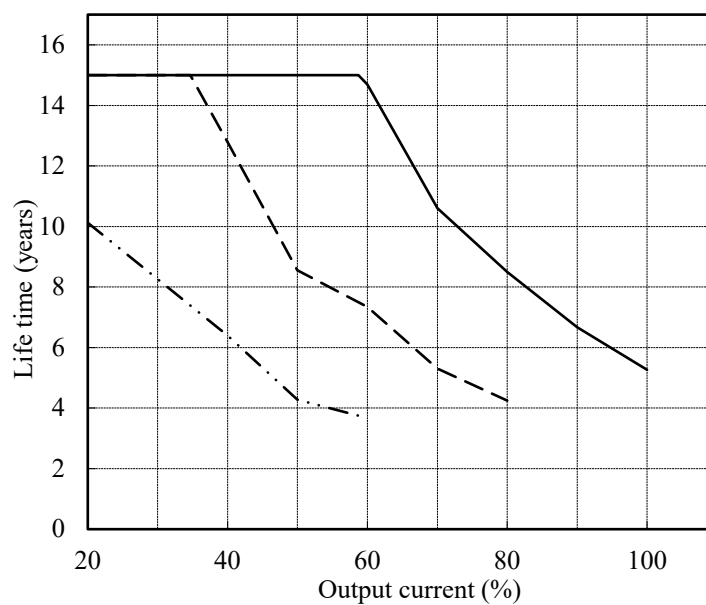
Output : 5V/12A; +12V/2.8A; -12V/0.5A

取付方向 D
Mounting D

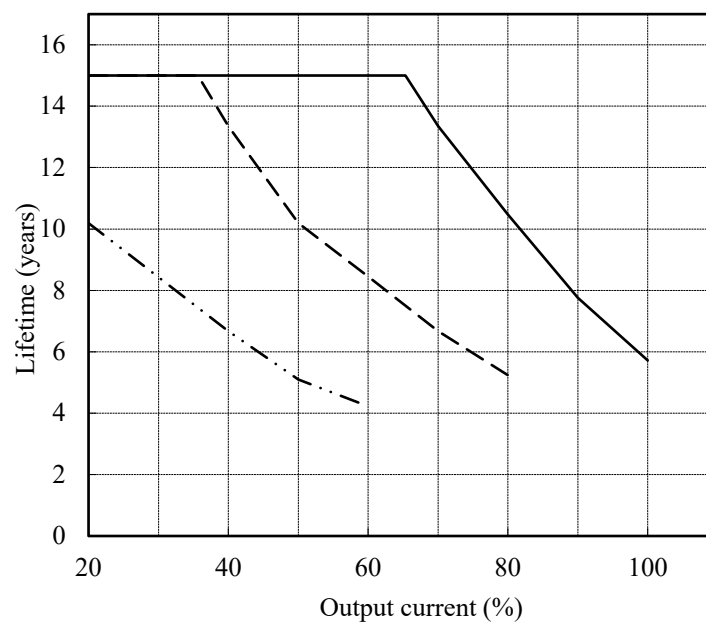

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	10.1
40	15.0	12.8	6.4
50	15.0	8.6	4.3
60	14.7	7.3	3.7
70	10.6	5.3	-
80	8.5	4.2	-
90	6.7	-	-
100	5.3	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —


$$V_{in}=230VAC$$

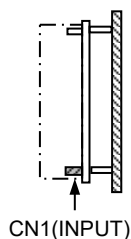
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	10.2
40	15.0	13.4	6.7
50	15.0	10.2	5.1
60	15.0	8.5	4.2
70	13.4	6.7	-
80	10.5	5.2	-
90	7.8	-	-
100	5.7	-	-



MODEL : CUT100-522

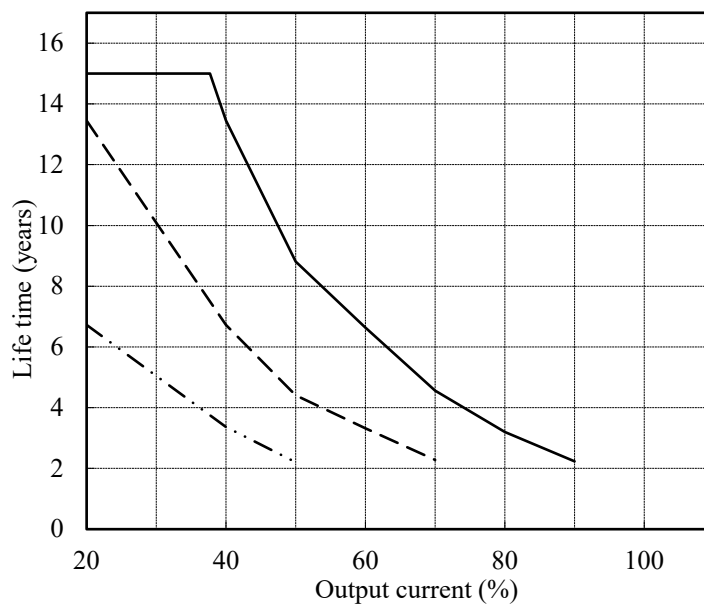
Output : 5V/12A; +12V/2.8A; -12V/0.5A

取付方向 E
Mounting E

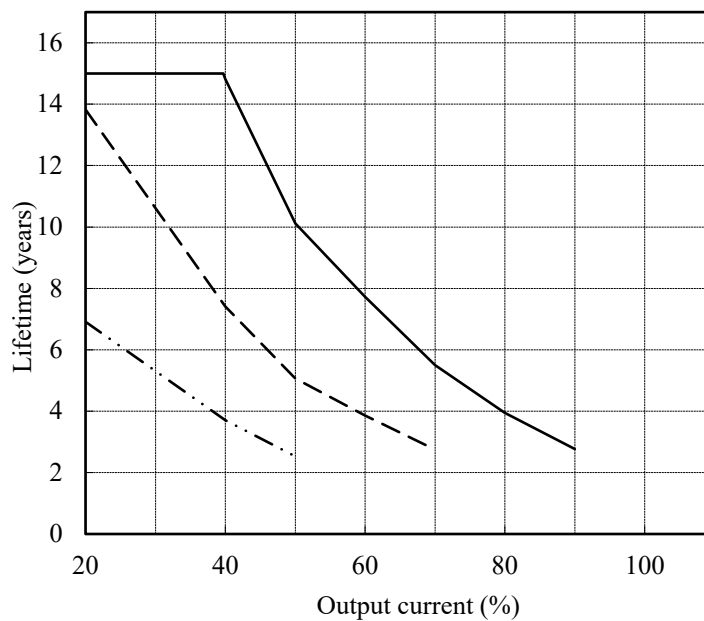

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	13.4	6.7
40	13.4	6.7	3.4
50	8.8	4.4	2.2
60	6.6	3.3	-
70	4.6	2.3	-
80	3.2	-	-
90	2.2	-	-
100	-	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —


$$V_{in}=230VAC$$

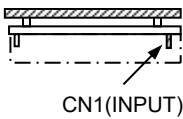
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	13.8	6.9
40	14.8	7.4	3.7
50	10.1	5.1	2.5
60	7.7	3.9	-
70	5.5	2.7	-
80	3.9	-	-
90	2.8	-	-
100	-	-	-



MODEL : CUT100-522

Output : 5V/12A; +12V/2.8A; -12V/0.5A

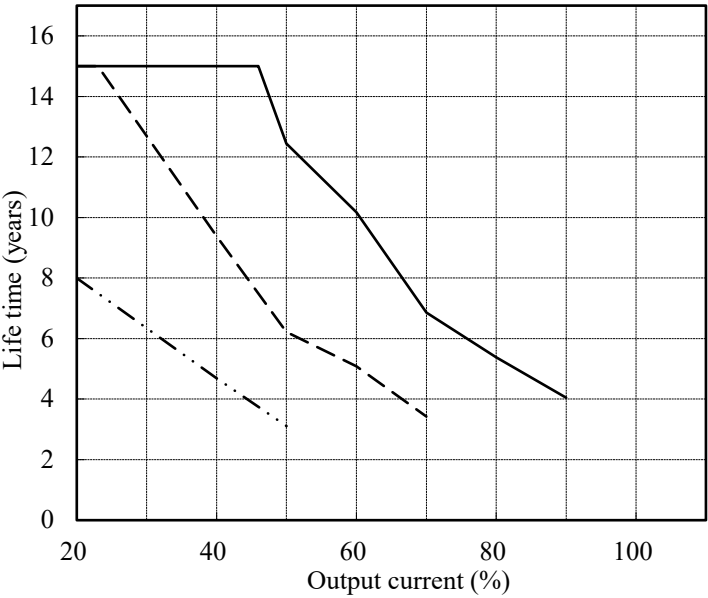
取付方向 F
Mounting F



Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - -

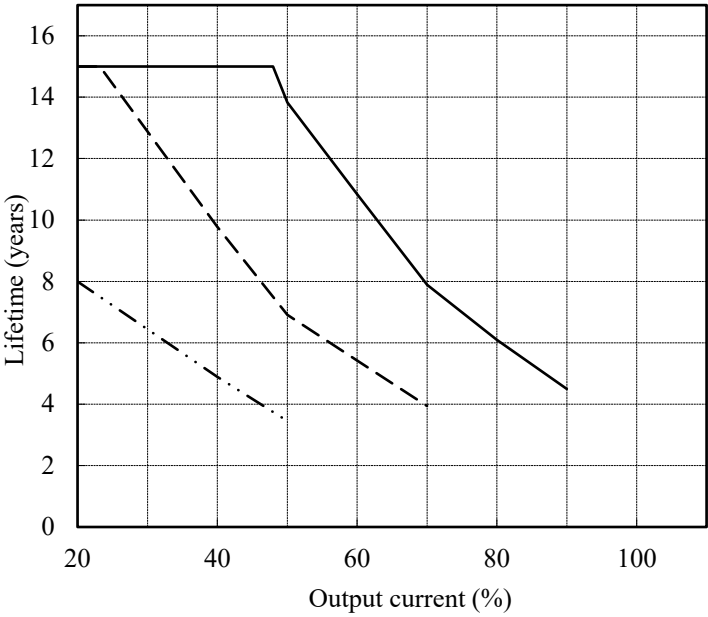
Vin=100VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	8.0
40	15.0	9.4	4.7
50	12.4	6.2	3.1
60	10.2	5.1	-
70	6.9	3.4	-
80	5.4	-	-
90	4.0	-	-
100	-	-	-



Vin=230VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	8.0
40	15.0	9.8	4.9
50	13.8	6.9	3.5
60	10.8	5.4	-
70	7.9	3.9	-
80	6.1	-	-
90	4.5	-	-
100	-	-	-



4. 電解コンデンサ推定寿命計算値

Electrolytic Capacitor Lifetime

MODEL : CUT100-5FF

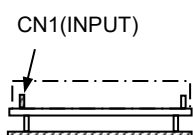
Output : 5V/10A; +15V/2.8A; -15V/0.5A

空冷条件：自然空冷

Cooling condition : Convection cooling

取付方向 A

Mounting A



Conditions

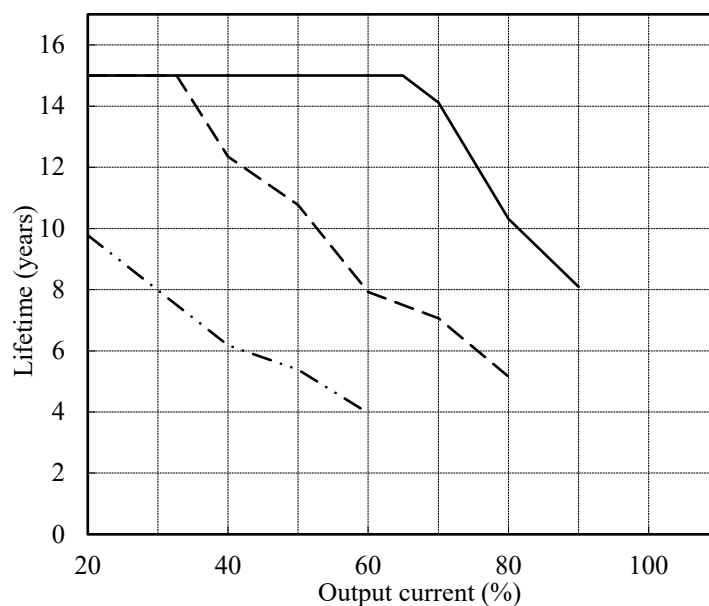
Ta 40°C : _____

50°C : — — —

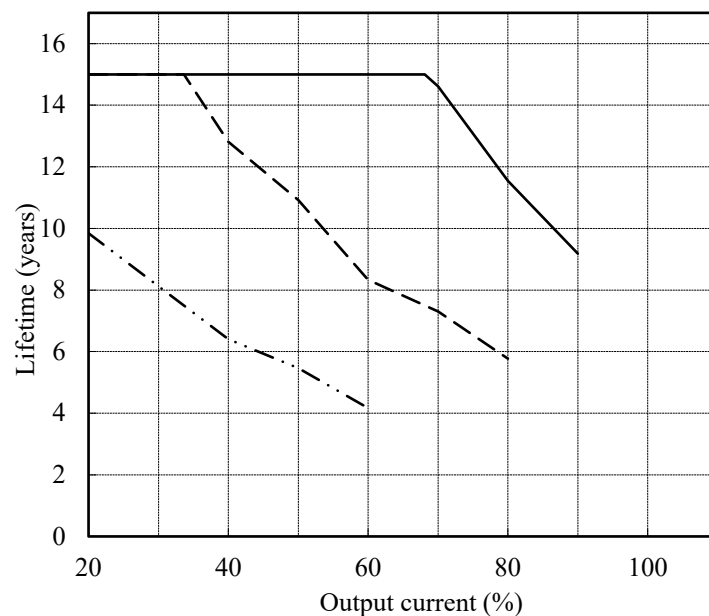
60°C : — . . —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	9.8
40	15.0	12.4	6.2
50	15.0	10.8	5.4
60	15.0	7.9	4.0
70	14.1	7.1	-
80	10.3	5.2	-
90	8.1	-	-
100	6.5	-	-


$$V_{in}=230VAC$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.8
40	15.0	12.8	6.4
50	15.0	10.9	5.5
60	15.0	8.3	4.2
70	14.6	7.3	-
80	11.5	5.8	-
90	9.2	-	-
100	7.4	-	-

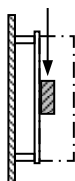


MODEL : CUT100-5FF

Output : 5V/10A; +15V/2.8A; -15V/0.5A

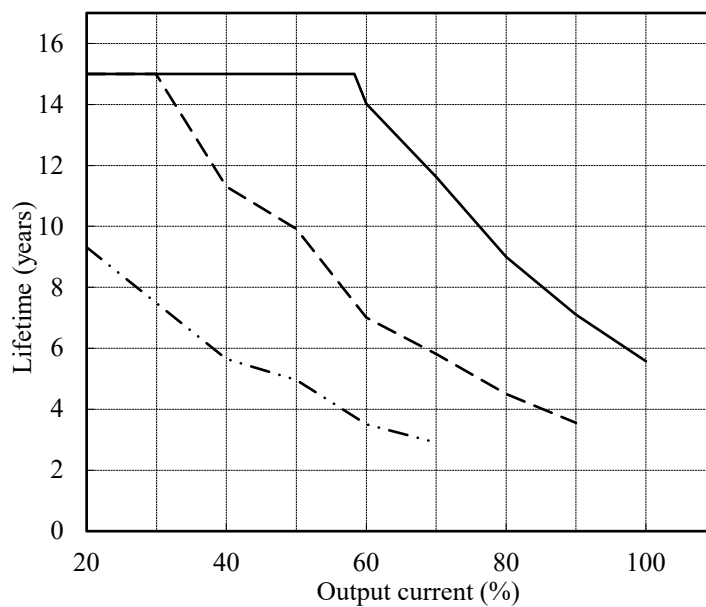
取付方向 B
Mounting B

CN1(INPUT)

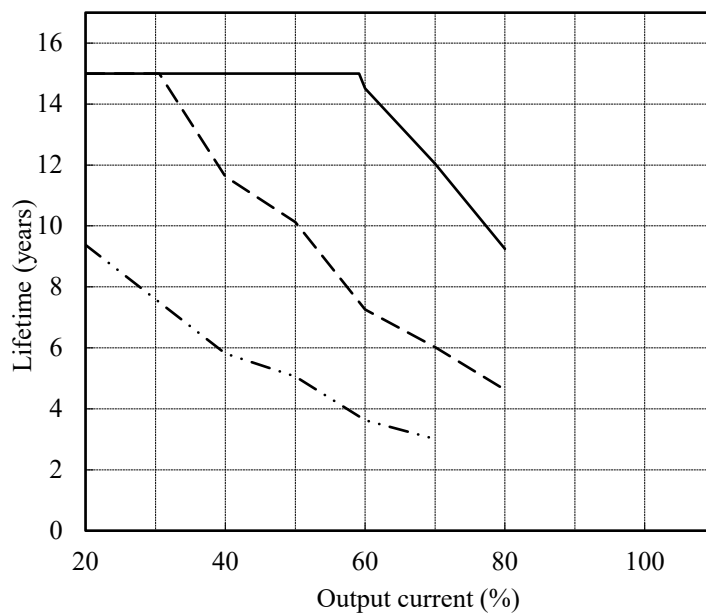

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.3
40	15.0	11.3	5.7
50	15.0	9.9	5.0
60	14.0	7.0	3.5
70	11.6	5.8	2.9
80	9.0	4.5	-
90	7.1	3.6	-
100	5.6	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —


$$V_{in}=230VAC$$

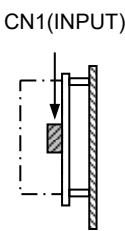
Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	9.4
40	15.0	11.6	5.8
50	15.0	10.1	5.1
60	14.5	7.3	3.6
70	12.0	6.0	3.0
80	9.2	4.6	-
90	7.4	3.7	-
100	6.0	-	-



MODEL : CUT100-5FF

Output : 5V/10A; +15V/2.8A; -15V/0.5A

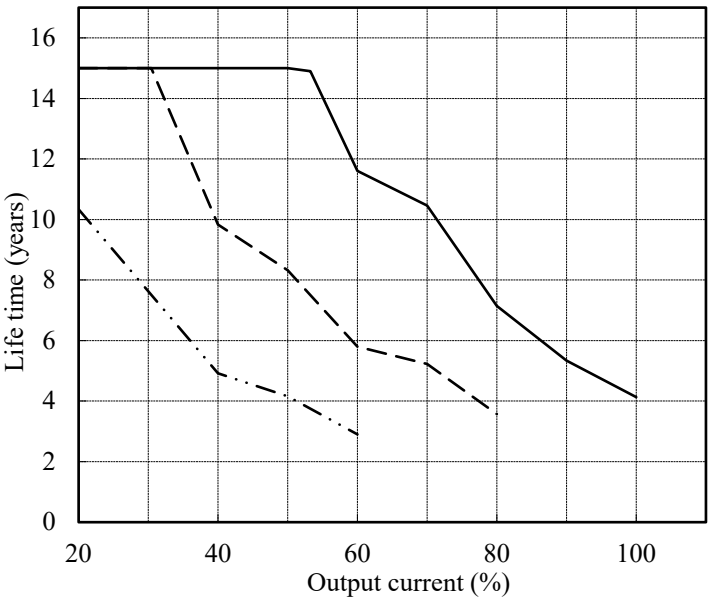
取付方向 C
Mounting C



Vin=100VAC

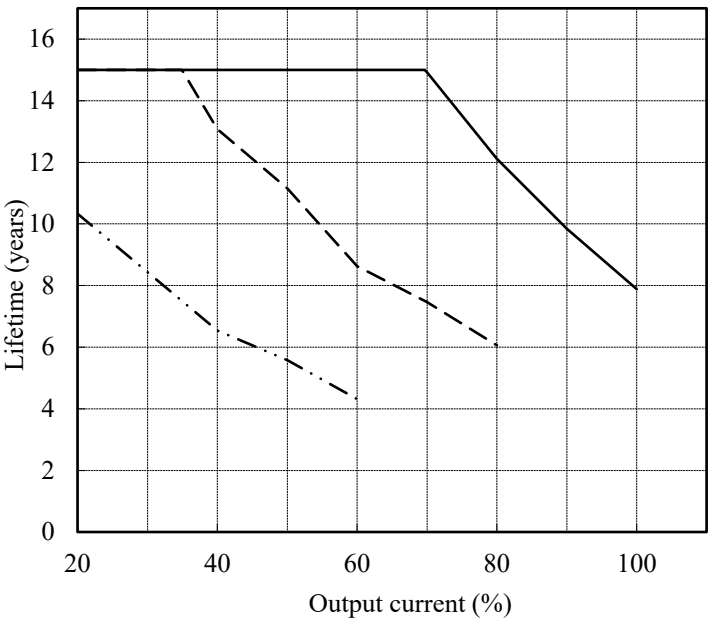
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	10.3
40	15.0	9.8	4.9
50	15.0	8.3	4.2
60	11.6	5.8	2.9
70	10.5	5.2	-
80	7.1	3.6	-
90	5.3	-	-
100	4.1	-	-

Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - ·



Vin=230VAC

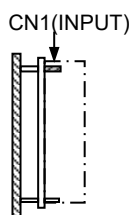
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	10.3
40	15.0	13.1	6.5
50	15.0	11.2	5.6
60	15.0	8.6	4.3
70	14.9	7.5	-
80	12.1	6.1	-
90	9.8	-	-
100	7.9	-	-



MODEL : CUT100-5FF

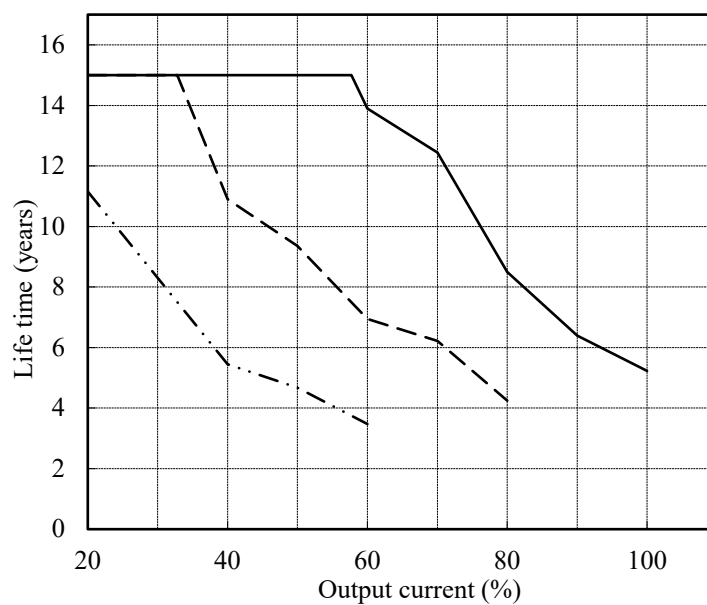
Output : 5V/10A; +15V/2.8A; -15V/0.5A

取付方向 D
Mounting D


$$V_{in}=100V_{AC}$$

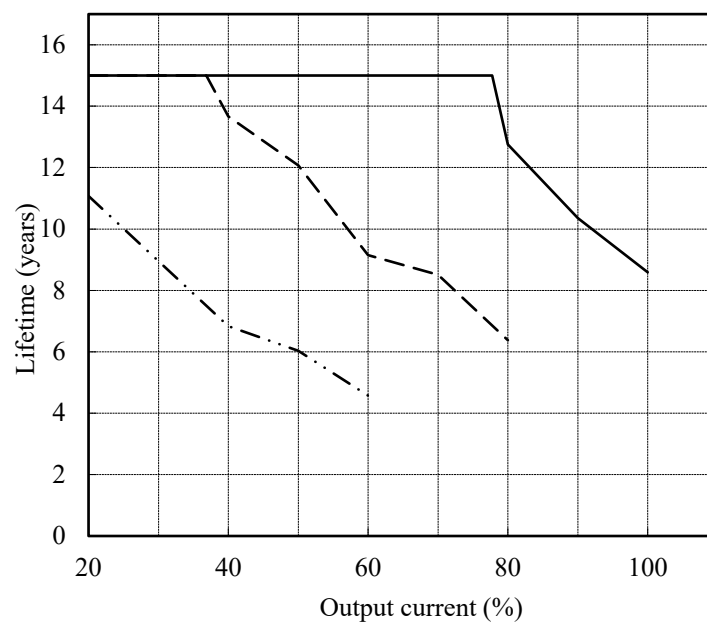
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	11.2
40	15.0	10.9	5.5
50	15.0	9.4	4.7
60	13.9	6.9	3.5
70	12.4	6.2	-
80	8.5	4.2	-
90	6.4	-	-
100	5.2	-	-

Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



V_{in}=230VAC

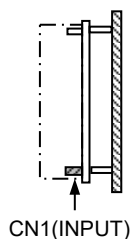
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	11.1
40	15.0	13.7	6.8
50	15.0	12.1	6.0
60	15.0	9.1	4.6
70	15.0	8.5	-
80	12.8	6.4	-
90	10.4	-	-
100	8.6	-	-



MODEL : CUT100-5FF

Output : 5V/10A; +15V/2.8A; -15V/0.5A

取付方向 E
Mounting E

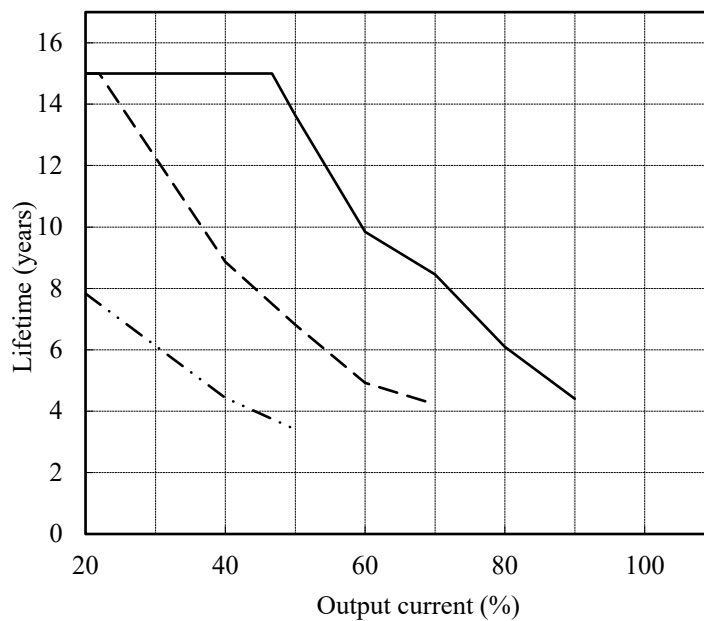
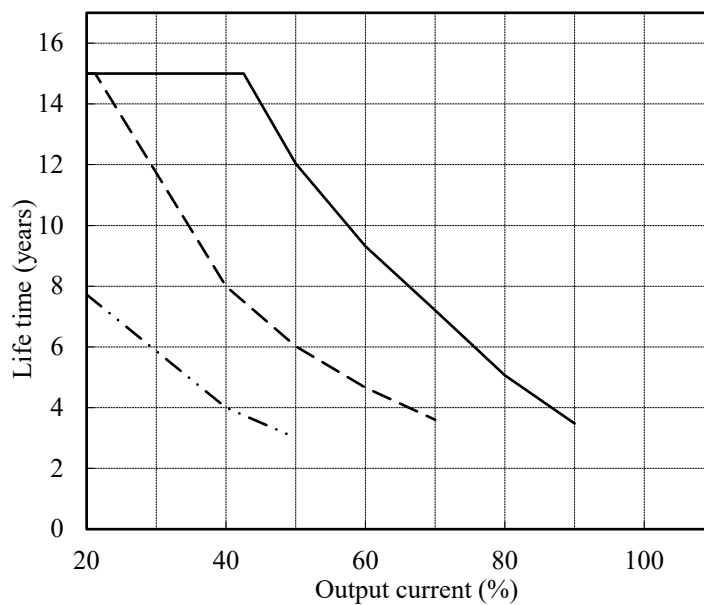

$$V_{in}=100VAC$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	7.7
40	15.0	8.0	4.0
50	12.0	6.0	3.0
60	9.3	4.7	-
70	7.2	3.6	-
80	5.1	-	-
90	3.5	-	-
100	-	-	-

$$V_{in}=230VAC$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	7.8
40	15.0	8.9	4.4
50	13.6	6.8	3.4
60	9.8	4.9	-
70	8.5	4.2	-
80	6.1	-	-
90	4.4	-	-
100	-	-	-

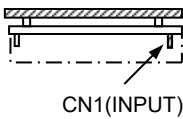
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



MODEL : CUT100-5FF

Output : 5V/10A; +15V/2.8A; -15V/0.5A

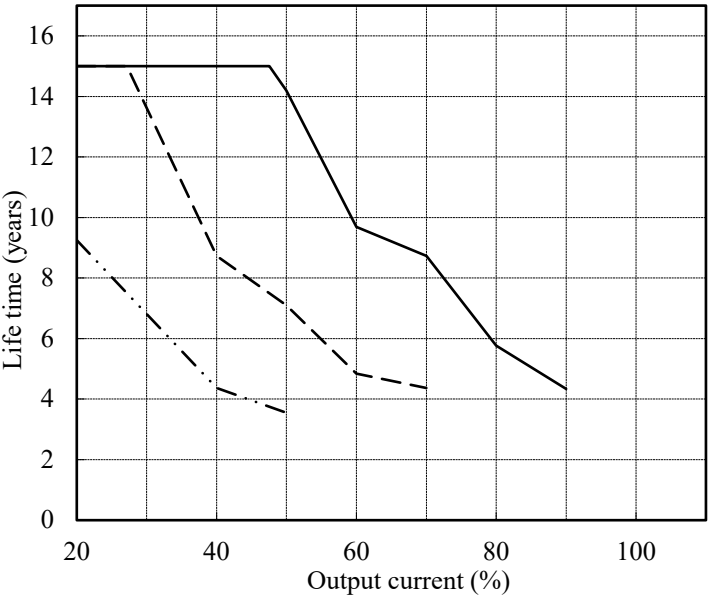
取付方向 F
Mounting F



Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - -

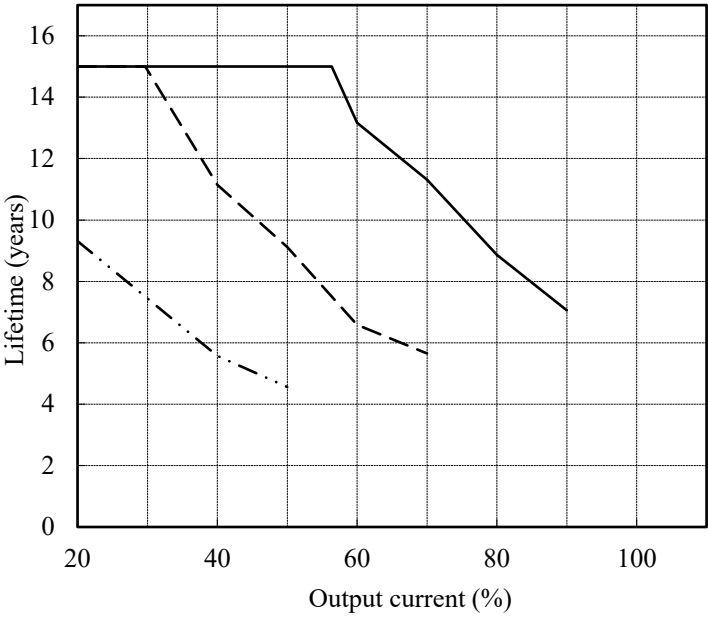
Vin=100VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.2
40	15.0	8.7	4.4
50	14.2	7.1	3.5
60	9.7	4.8	-
70	8.7	4.4	-
80	5.8	-	-
90	4.3	-	-
100	-	-	-



Vin=230VAC

Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.3
40	15.0	11.2	5.6
50	15.0	9.1	4.6
60	13.2	6.6	-
70	11.3	5.7	-
80	8.9	-	-
90	7.1	-	-
100	5.2	-	-



4. 電解コンデンサ推定寿命計算値

Electrolytic Capacitor Lifetime

MODEL : CUT100-5FF

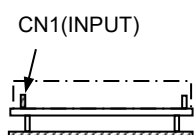
Output : 5V/12A; +15V/2.2A; -15V/0.5A

空冷条件：自然空冷

Cooling condition : Convection cooling

取付方向 A

Mounting A



Conditions

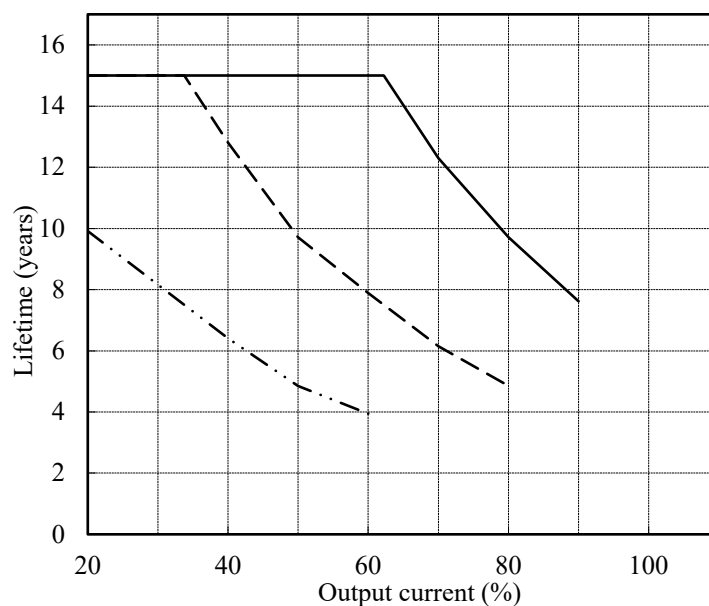
Ta 40°C : _____

50°C : — — —

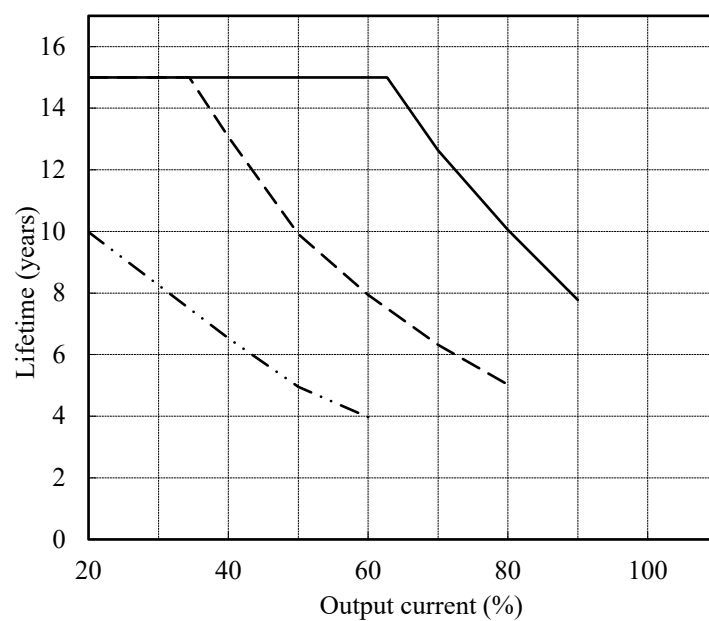
60°C : — . . —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	9.9
40	15.0	12.8	6.4
50	15.0	9.7	4.9
60	15.0	7.9	3.9
70	12.3	6.1	-
80	9.7	4.9	-
90	7.6	-	-
100	5.7	-	-


$$V_{in}=230VAC$$

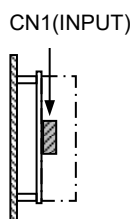
Load (%)	Lifetime (years)		
	Ta=40°C	Ta=50°C	Ta=60°C
20	15.0	15.0	10.0
40	15.0	13.1	6.5
50	15.0	9.9	5.0
60	15.0	7.9	4.0
70	12.6	6.3	-
80	10.1	5.0	-
90	7.8	-	-
100	5.9	-	-



MODEL : CUT100-5FF

Output : 5V/12A; +15V/2.2A; -15V/0.5A

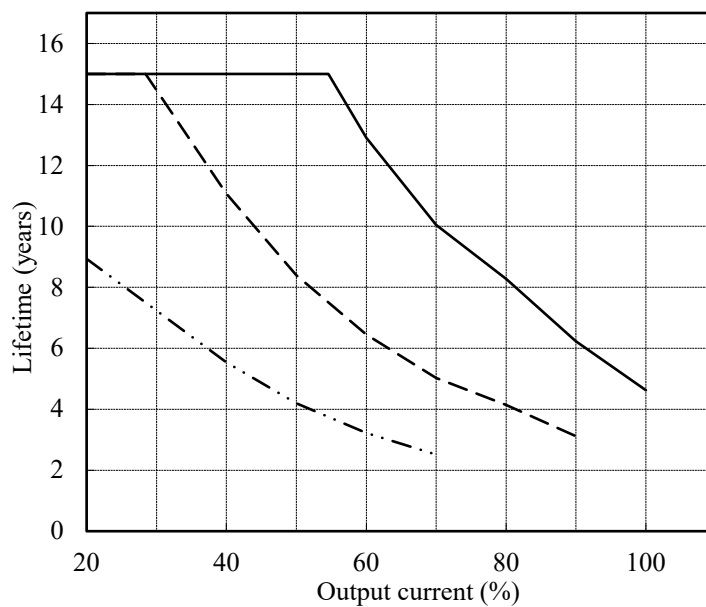
取付方向 B
Mounting B



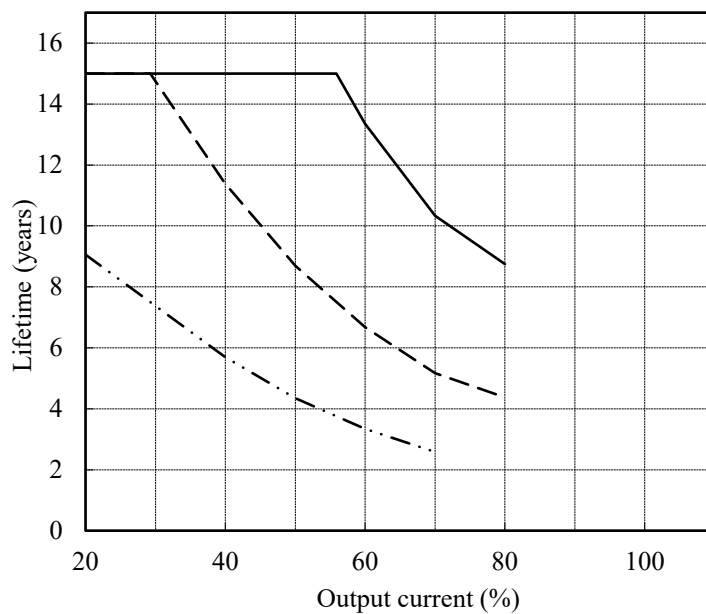
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.9
40	15.0	11.1	5.5
50	15.0	8.4	4.2
60	12.9	6.5	3.2
70	10.1	5.0	2.5
80	8.3	4.1	-
90	6.2	3.1	-
100	4.6	-	-

 $V_{in}=230VAC$

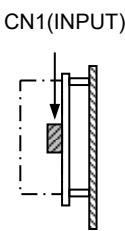
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	9.1
40	15.0	11.4	5.7
50	15.0	8.7	4.3
60	13.4	6.7	3.3
70	10.3	5.2	2.6
80	8.7	4.4	-
90	6.6	3.3	-
100	5.0	-	-



MODEL : CUT100-5FF

Output : 5V/12A; +15V/2.2A; -15V/0.5A

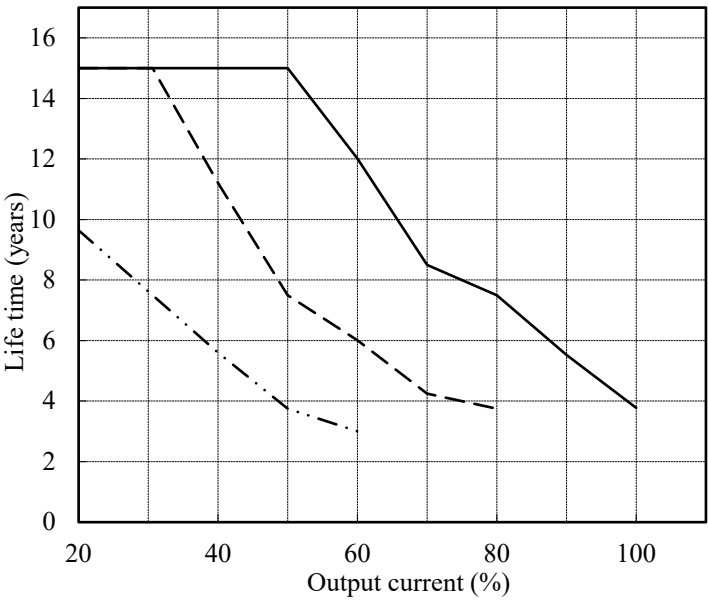
取付方向 C
Mounting C



Vin=100VAC

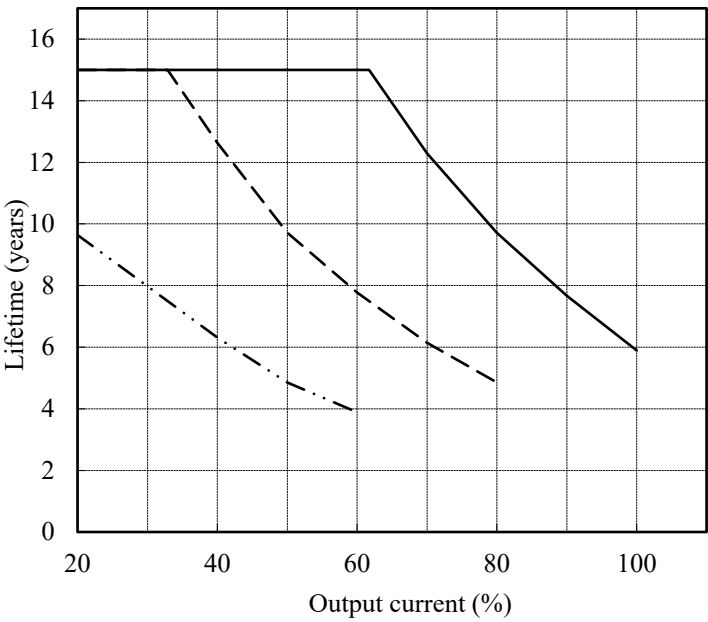
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.6
40	15.0	11.2	5.6
50	15.0	7.5	3.7
60	12.0	6.0	3.0
70	8.5	4.2	-
80	7.5	3.7	-
90	5.5	-	-
100	3.8	-	-

Conditions Ta 40℃ : ———
 50℃ : - - - -
 60℃ : - · - ·



Vin=230VAC

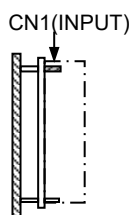
Load (%)	Lifetime (years)		
	Ta=40℃	Ta=50℃	Ta=60℃
20	15.0	15.0	9.6
40	15.0	12.6	6.3
50	15.0	9.7	4.9
60	15.0	7.8	3.9
70	12.3	6.1	-
80	9.7	4.9	-
90	7.7	-	-
100	5.9	-	-



MODEL : CUT100-5FF

Output : 5V/12A; +15V/2.2A; -15V/0.5A

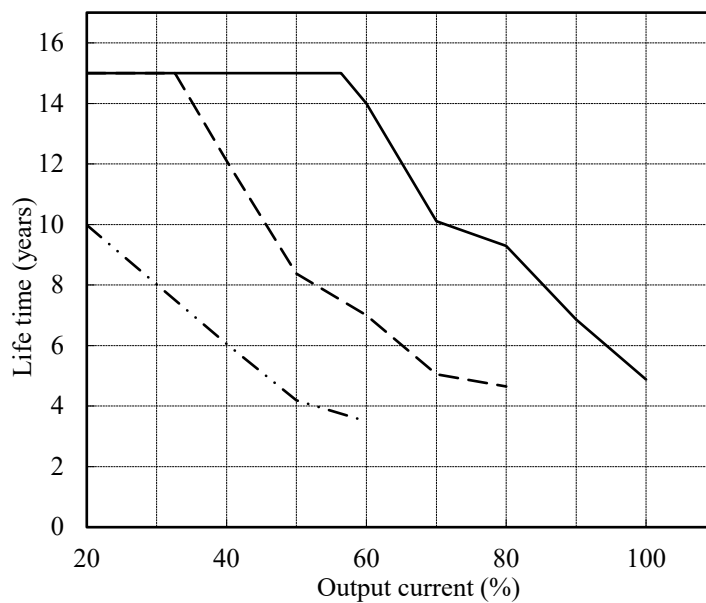
取付方向 D
Mounting D


$$V_{in}=100V_{AC}$$

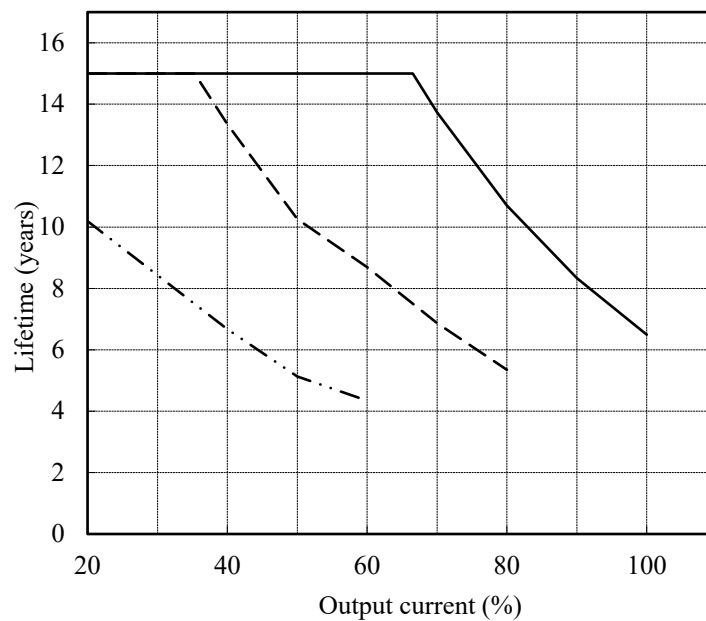
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	10.0
40	15.0	12.1	6.0
50	15.0	8.4	4.2
60	14.0	7.0	3.5
70	10.1	5.1	-
80	9.3	4.6	-
90	6.9	-	-
100	4.9	-	-

Conditions

Ta 40°C : _____
 50°C : - - - -
 60°C : - . . -

 $V_{in}=230VAC$

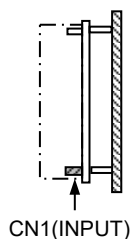
Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	10.2
40	15.0	13.4	6.7
50	15.0	10.3	5.1
60	15.0	8.7	4.3
70	13.7	6.9	-
80	10.7	5.3	-
90	8.3	-	-
100	6.5	-	-



MODEL : CUT100-5FF

Output : 5V/12A; +15V/2.2A; -15V/0.5A

取付方向 E
Mounting E

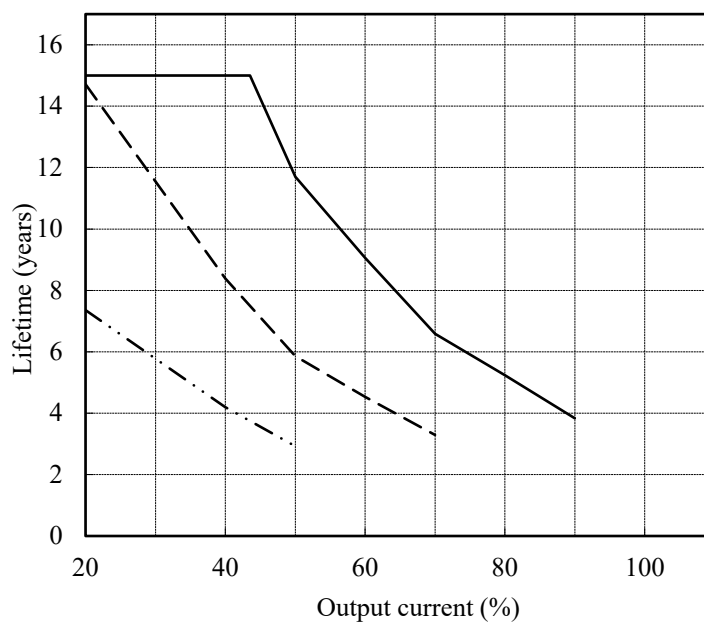
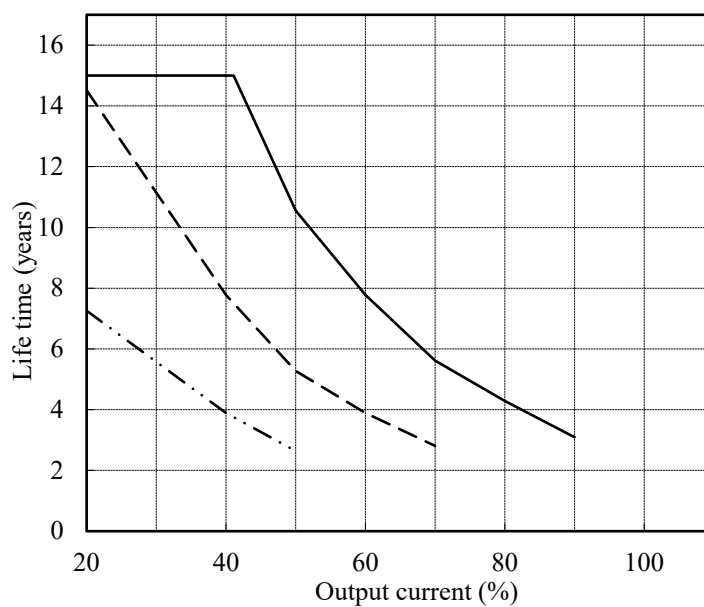

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	14.5	7.3
40	15.0	7.8	3.9
50	10.6	5.3	2.6
60	7.8	3.9	-
70	5.6	2.8	-
80	4.3	-	-
90	3.1	-	-
100	-	-	-

$$V_{in}=230VAC$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	14.7	7.4
40	15.0	8.4	4.2
50	11.7	5.9	2.9
60	9.1	4.5	-
70	6.6	3.3	-
80	5.2	-	-
90	3.8	-	-
100	-	-	-

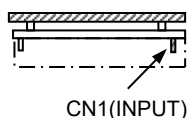
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —



MODEL : CUT100-5FF

Output : 5V/12A; +15V/2.2A; -15V/0.5A

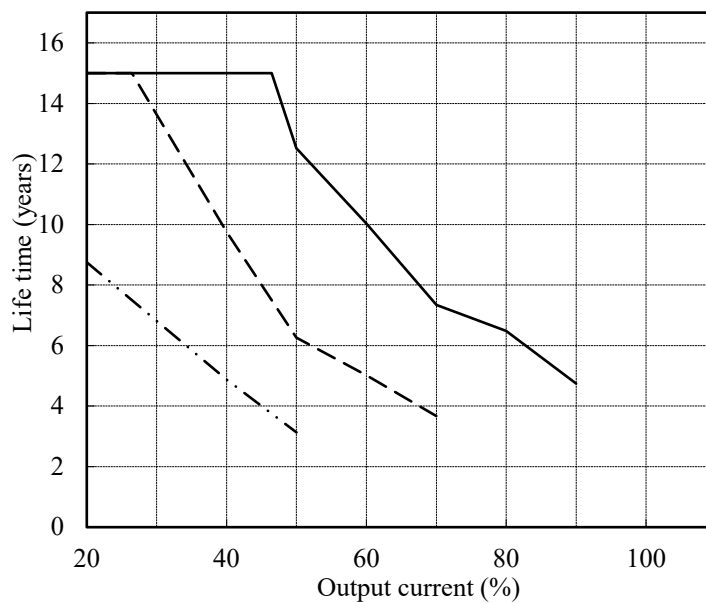
取付方向 F
Mounting F



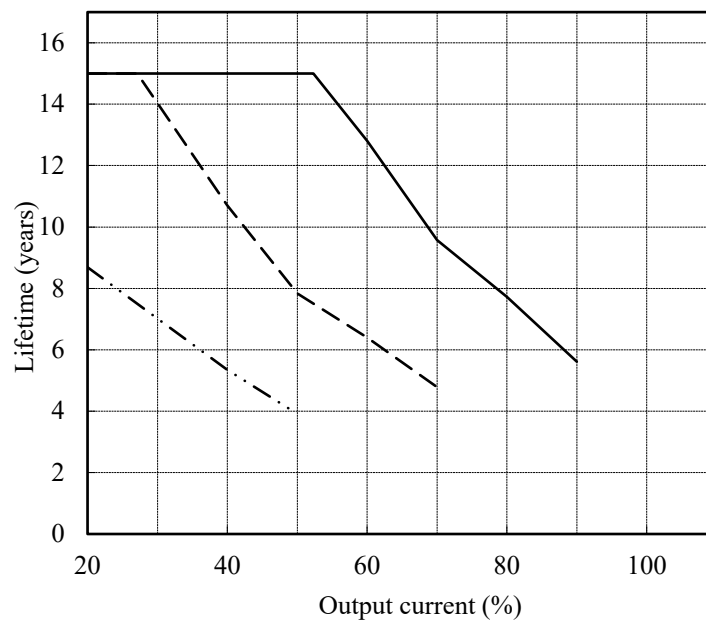
Conditions Ta 40°C : ———
 50°C : — — —
 60°C : — · · —

$$V_{in}=100V_{AC}$$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.8
40	15.0	9.8	4.9
50	12.5	6.3	3.1
60	10.0	5.0	-
70	7.3	3.7	-
80	6.5	-	-
90	4.7	-	-
100	-	-	-

 $V_{in}=230VAC$

Load (%)	Lifetime (years)		
	Ta= 40°C	Ta= 50°C	Ta= 60°C
20	15.0	15.0	8.7
40	15.0	10.7	5.3
50	15.0	7.8	3.9
60	12.8	6.4	-
70	9.6	4.8	-
80	7.7	-	-
90	5.6	-	-
100	-	-	-



5. アブノーマル試験 Abnormal Test

MODEL : CUT100-522

(1) 試験条件 Test Conditions

Input : 230VAC Output : 5V/10A; +12V/3.5A; -12V/0.5A Ta : 25°C

(2) 試験結果 Test Results

(Da : Damaged)

No.	Test position		Test mode		Test result													記事 Note
	部品No. Location No.	試験端子 Test point	ショート Short	オープン Open	a	b	c	d	e	f	g	h	i	j	k	l		
					発火 Fire	発煙 Smoke	破裂 Burst	異臭 Smell	赤熱 Red hot	破損 Damaged	ヒューズ断 Fuse blown	OVP	OCP	出力断 No output	変化なし No change	その他 Others		
1	A101	1~2	○												○			
2		2~3	○												○			
3		3~4	○													○	Input current increases	
4		4~5	○													○	Input current increases	
5		6~7	○													○	Input current increases	
6		7~8	○							○	○			○			Da: Q1	
7		8~10	○							○	○			○			Da: Q1, A101, D106, D107, R125, R133, R134	
8		1		○												○	Input current increases	
9		2		○										○			All channels no output	
10		3		○												○	Input current increases	
11		4		○												○	Input current increases	
12		5		○										○			All channels no output	
13		6		○						○	○			○			Da: Q1	
14		7		○												○	Input current increases	
15		8		○												○	Input current increases	
16		10		○												○	Input current increases	
17	A103	1~2	○													○	CH1 no output	
18		2~3	○													○	CH1 no output	
19		3~4	○							○	○			○			Da: Q2, Z105	
20		5~6	○							○	○			○			Da: Q2, Z105	
21		6~8	○													○	CH1 no output	
22		1		○											○			
23		2		○								○					CH1 no output	
24		3		○												○	CH1 no output	
25		4		○						○	○			○			Da: Q2, Z105, Z108	
26		5		○												○	CH1 no output	
27		6		○												○	CH1 no output	
28		8		○												○	CH1 no output	
29	A104	1~2	○													○	CH2, CH3 no output	
30		2~3	○													○	CH2, CH3 no output	
31		3~4	○							○	○			○			Da: Q3, Z104	
32		5~6	○							○	○			○			Da: Q3, Z104	
33		6~8	○													○	CH2, CH3 no output	
34		1		○											○			
35		2		○								○					CH2, CH3 no output	
36		3		○												○	CH2, CH3 no output	
37		4		○						○	○			○			Da: Q3, Z103, Z104	
38		5		○												○	CH2, CH3 no output	
39		6		○												○	CH2, CH3 no output	
40		8		○												○	CH2, CH3 no output	
41	C5		○								○			○				
42				○										○			All channels no output	

5. アブノーマル試験 Abnormal Test

MODEL : CUT100-522

(1) 試験条件 Test Conditions

Input : 230VAC Output : 5V/10A; +12V/3.5A; -12V/0.5A Ta : 25°C

(2) 試験結果 Test Results

(Da : Damaged)

No.	Test position		Test mode		Test result												記事 Note
	部品No. Location No.	試験端子 Test point	ショート Short	オープン Open	a 発火 Fire	b 発煙 Smoke	c 破裂 Burst	d 異臭 Smell	e 赤熱 Red hot	f 破損 Damaged	g ヒューズ断 Fuse blown	h OVP	i OCP	j 出力断 No output	k 変化なし No change	l その他 Others	
43	D1	AC~AC	○								○			○			
44		DC~DC	○								○			○			
45		AC		○										○			All channels no output
46		DC		○										○			All channels no output
47	D51 / D52		○													○	CH1 no output
48	D61 / D62			○												○	Input power increases
49			○													○	CH2, CH3 no output
50				○												○	CH2, CH3 no output
51				○												○	Input current increases
52	Q1	G		○												○	Input current increases
53		D		○												○	Input current increases
54		S		○												○	Input current increases
55		G - S	○													○	Input current increases
56	Q2	D - G	○							○	○			○			Da: A101, Q1
57		D - S	○								○			○			
58		G		○						○	○			○			Da: Q2, Z105
59		D		○												○	CH1 no output
60		S		○												○	CH1 no output
61		G - S	○													○	CH1 no output
62		D - G	○							○	○			○			Da: A103, D104, Q2, Z105
63	Q3	D - S	○							○	○			○			Da: D104, Z105
64		G		○						○	○			○			Da: Q3, Z104
65		D		○												○	CH2, CH3 no output
66		S		○												○	CH2, CH3 no output
67		G - S	○													○	CH2, CH3 no output
68		D - G	○							○	○			○			Da: A104, D104, Q3, Z104
69		D - S	○							○	○			○			Da: D104, Z104
70	T1	3,4~5,6	○													○	CH1 no output
71		7~9	○													○	CH1 no output
72		9~10	○							○	○			○			Da: D104, Z108
73		10~11	○													○	CH1 no output
74		3/4		○											○		
75		5/6		○											○		
76		7/9		○												○	CH1 no output
77		10/11		○												○	CH1 no output
78	T2	1~3	○													○	CH2, CH3 no output
79		3~4	○													○	CH2, CH3 no output
80		4~5	○													○	CH2, CH3 no output
81		7~9	○													○	CH2, CH3 no output
82		9~10	○							○	○			○			Da: D104, Z103
83		10~12	○													○	CH2, CH3 no output
84		1/3		○												○	CH2, CH3 no output
85		4/5		○												○	CH2, CH3 no output
86		7/9		○												○	CH2, CH3 no output
87		10/12		○												○	CH2, CH3 no output

5. アブノーマル試験 Abnormal Test

MODEL : CUT100-5FF

(1) 試験条件 Test Conditions

Input : 230VAC Output : 5V/10A; +15V/2.8A; -15V/0.5A Ta : 25°C

(2) 試験結果 Test Results

(Da : Damaged)

No.	Test position		Test mode		Test result													記事 Note
	部品No. Location No.	試験端子 Test point	シ ョ ー ト Short	オ ー プ ン Open	a	b	c	d	e	f	g	h	I	j	k	l		
					発 火 Fire	発 煙 Smoke	破 裂 Burst	異 臭 Smell	赤 熱 Red hot	破 損 Damaged	ヒ ュ ー ズ 断 Fuse blown	O V P	O C P	出 力 断 No output	変 化 な し No change	そ の 他 Others		
1	A101	1~2	○												○			
2		2~3	○												○			
3		3~4	○													○	Input current increases	
4		4~5	○													○	Input current increases	
5		6~7	○													○	Input current increases	
6		7~8	○							○	○			○			Da: Q1	
7		8~10	○							○	○			○			Da: Q1, A101, D106, D107, R125, R133, R134	
8		1		○												○	Input current increases	
9		2		○											○		All channels no output	
10		3		○												○	Input current increases	
11		4		○												○	Input current increases	
12		5		○											○		All channels no output	
13		6		○						○	○				○		Da: Q1	
14		7		○												○	Input current increases	
15		8		○												○	Input current increases	
16		10		○												○	Input current increases	
17	A103	1~2	○													○	CH1 no output	
18		2~3	○													○	CH1 no output	
19		3~4	○							○	○			○			Da: Q2, Z105	
20		5~6	○							○	○			○			Da: Q2, Z105	
21		6~8	○													○	CH1 no output	
22		1		○												○		
23		2		○									○				CH1 no output	
24		3		○												○	CH1 no output	
25		4		○						○	○				○		Da: Q2, Z105, Z108	
26		5		○												○	CH1 no output	
27		6		○												○	CH1 no output	
28		8		○												○	CH1 no output	
29	A104	1~2	○													○	CH2, CH3 no output	
30		2~3	○													○	CH2, CH3 no output	
31		3~4	○							○	○			○			Da: Q3, Z104	
32		5~6	○							○	○			○			Da: Q3, Z104	
33		6~8	○													○	CH2, CH3 no output	
34		1		○												○		
35		2		○									○				CH2, CH3 no output	
36		3		○												○	CH2, CH3 no output	
37		4		○						○	○			○			Da: Q3, Z103, Z104	
38		5		○												○	CH2, CH3 no output	
39		6		○												○	CH2, CH3 no output	
40		8		○												○	CH2, CH3 no output	
41	C5		○								○			○				
42				○										○			All channels no output	

5. アブノーマル試験 Abnormal Test

MODEL : CUT100-5FF

(1) 試験条件 Test Conditions

Input : 230VAC Output : 5V/10A; +15V/2.8A; -15V/0.5A Ta : 25°C

(2) 試験結果 Test Results

(Da : Damaged)

No.	Test position		Test mode		Test result												記事 Note
	部品No. Location No.	試験端子 Test point	ショート Short	オープン Open	a 発火 Fire	b 発煙 Smoke	c 破裂 Burst	d 異臭 Smell	e 赤熱 Red hot	f 破損 Damaged	g ヒューズ断 Fuse blown	h OVP	i OCP	j 出力断 No output	k 変化なし No change	l その他 Others	
43	D1	AC~AC	○								○			○			
44		DC~DC	○								○			○			
45		AC		○										○			All channels no output
46		DC		○										○			All channels no output
47	D51 / D52		○													○	CH1 no output
48	D61 / D62			○												○	Input power increases
49			○													○	CH2, CH3 no output
50				○												○	CH2, CH3 no output
51				○												○	Input current increases
52	Q1	G		○												○	Input current increases
53		D		○												○	Input current increases
54		S		○												○	Input current increases
55		G - S	○													○	Input current increases
56	Q2	D - G	○							○	○			○			Da: A101, Q1
57		D - S	○								○			○			
58		G		○						○	○			○			Da: Q2, Z105
59		D		○												○	CH1 no output
60		S		○												○	CH1 no output
61		G - S	○													○	CH1 no output
62		D - G	○							○	○			○			Da: A103, D104, Q2, Z105
63	Q3	D - S	○							○	○			○			Da: D104, Z105
64		G		○						○	○			○			Da: Q3, Z104
65		D		○												○	CH2, CH3 no output
66		S		○												○	CH2, CH3 no output
67		G - S	○													○	CH2, CH3 no output
68		D - G	○							○	○			○			Da: A104, D104, Q3, Z104
69		D - S	○							○	○			○			Da: D104, Z104
70	T1	3,4-5,6	○													○	CH1 no output
71		7~9	○													○	CH1 no output
72		9~10	○							○	○			○			Da: D104, Z108
73		10~11	○													○	CH1 no output
74		3/4		○											○		
75		5/6		○											○		
76		7/9		○												○	CH1 no output
77		10/11		○												○	CH1 no output
78	T2	1~3	○													○	CH2, CH3 no output
79		3~4	○													○	CH2, CH3 no output
80		4~5	○													○	CH2, CH3 no output
81		7~9	○													○	CH2, CH3 no output
82		9~10	○							○	○			○			Da: D104, Z103
83		10~12	○													○	CH2, CH3 no output
84		1/3		○												○	CH2, CH3 no output
85		4/5		○												○	CH2, CH3 no output
86		7/9		○												○	CH2, CH3 no output
87		10/12		○												○	CH2, CH3 no output

6. 振動試験 Vibration Test

MODEL : CUT100

(1) 振動試験種類 Vibration Test Class

掃引振動数耐久試験 Frequency variable endurance test

(2) 使用振動試験装置 Equipment Used

・制御部 : DP550
Controller DP CORP USA

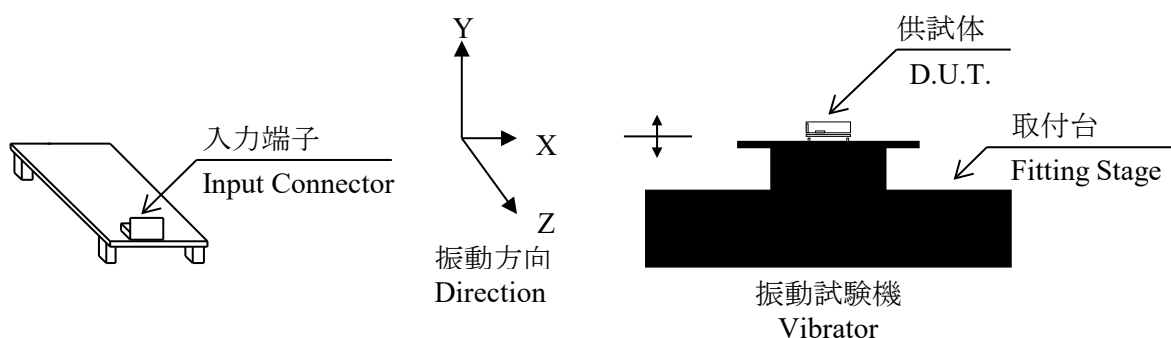
・加振部 : V870
Vibrator LDS CORP. UK

(3) 試験条件 Test Conditions

・周波数範囲 : 10～55Hz
Sweep frequency
・掃引時間 : 1.0分間
Sweep time 1.0min
・加速度 : 一定 19.6m/s^2 (2G)
Acceleration Constant

・振動方向 : X, Y, Z
Direction
・試験時間 : 各方向共 1時間
Sweep count 1 hour each

(4) 試験方法 Test Method



(5) 判定条件 Acceptable Conditions

- 1.破壊しない事
Not to be broken
- 2.試験後の特性は初期値から変動していない事
Characteristic to be within regulation specification after the test.

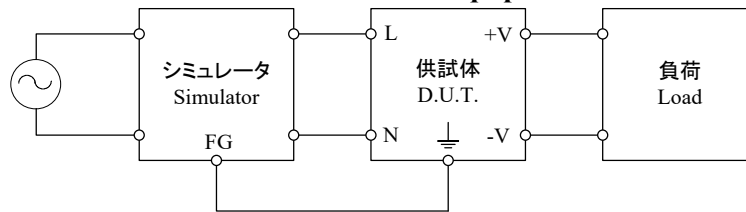
(6) 試験結果 Test Results

合格 OK

7. ノイズシミュレート試験 Noise Simulate Test

MODEL : CUT100

(1) 試験回路及び測定器 Test Circuit and Equipment



シミュレータ : INS-400L (ノイズ研究所)

Simulator : (Noise Laboratory Co.,LTD)

(2) 試験条件 Test Conditions

・入力電圧 Input voltage	: 100, 230VAC	・ノイズ電圧 Noise level	: 0～2kV
・出力電圧 Output Voltage	: 定格 Rated	・位相 Phase	: 0～360 deg
・出力電流 Output current	: 0, 100%	・極性 Polarity	: +, -
・周囲温度 Ambient temperature	: 25℃	・印加モード Mode	: コモン、ノーマル Common, Normal
・パルス幅 Pulse width	: 50～1000ns	・トリガ選択 Trigger select	: Line

(3) 判定条件 Acceptable Conditions

- 1.破壊しない事
Not to be broken
- 2.出力がダウンしない事
Not to be shut down output
- 3.その他異常のない事
No other out of orders

(4) 試験結果 Test Results

合格 OK

8. 熱衝撃試験 Thermal Shock Test

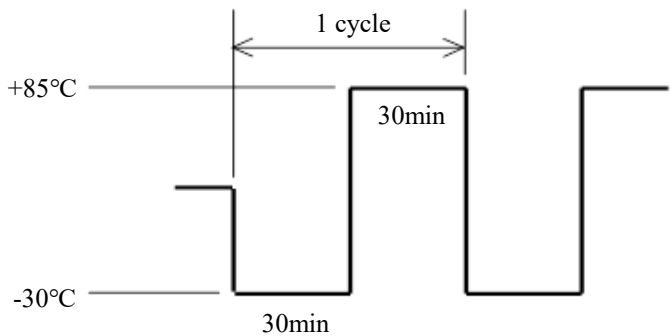
MODEL : CUT100

(1) 使用計測器 Equipment Used

Hitachi: ES-107LH

(2) 試験条件 Test Conditions

- ・電源周囲温度 : -30°C ⇔ 85°C +85°C
Ambient Temperature
- ・試験時間 : 図参照
Test Time Refer to Dwg.
- ・試験サイクル : 500 サイクル
Test Cycle 500 Cycles
- ・非動作
Not Operating



(3) 試験方法 Test Method

初期測定の後、供試品を試験槽に入れ、上記サイクルで試験を行う。100サイクル後に、供試品を常温常湿下に1時間放置し、出力に異常がない事を確認する。

Before testing, check if there is no abnormal output, then put the D.U.T. in testing chamber, and test it according to the above cycle. 100 cycles later, leave it for 1 hour at the room temperature, then check if there is no abnormal output.

(4) 判定条件 Acceptable Conditions

- 1.破壊しない事
Not to be broken
- 2.試験後の特性は初期値から変動していない事
Characteristic to be within regulation specification after the test.

(5) 試験結果 Test Results

合格 OK