

66W, 12A Non-isolated SMT Point Of Load

Features

- ◆ DOSA Compatible Footprint
- ◆ Surface Mountable
- ◆ Constant Switching Frequency
- ◆ Edge Plated Castellations (EPC)
 - Inspectable Solder Joints
- ◆ No external loop tuning components needed
- ◆ Excellent Transient Response



Key Market Segments & Applications



Specifications

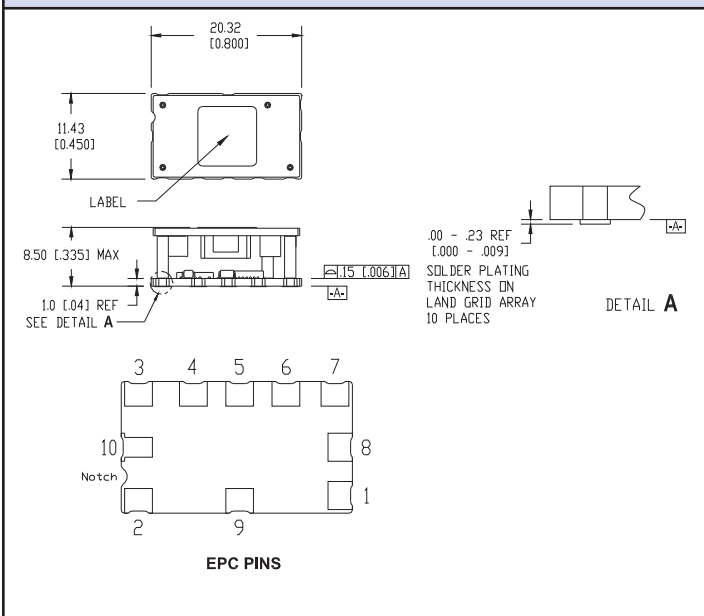
| Model | | iBF05 | iBF12 |
|---------------------------|----------|---|------------------|
| DC Output Voltage | V | 0.6 - 3.63 | 0.7 - 5.5 |
| DC Input Voltage | V | 2.4 - 5.5 | 4.5 - 14 |
| Efficiency | % | 84 - 93 | 83 - 94.5 |
| Output Voltage Tolerance | % | ±3 | |
| Switching Frequency | kHz | 600 | |
| Line Regulation | mV | 3 | 6 |
| Load Regulation | mV | 4 | 5 |
| External Load Capacitance | uF | 188 - 1800 | 100 - 1500 |
| Output Ripple and Noise | mVpp | 20 | 30 |
| Overcurrent Protection | A | Hiccup Type | |
| Remote On / Off | - | Negative Logic (For Positive Logic Contact Factory) | |
| Remote Sense | - | (+) Sense, compensating up to 0.5V | |
| Power Good | - | Not available | Yes, Low on fail |
| Operating Temp | °C | -40 to 115 (see thermal data on website) | |
| Storage Temperature | °C | -55 to 125 | |
| Safety Agency Approvals | - | IEC/UL/CSA/EN62368-1, 60950-1, CE Mark | |
| Weight | g / oz | 5.5g / 0.194 oz | |
| Size (LxWxH) | mm / in. | 20.32 x 11.43 x 8.5 / 0.80 x 0.45 x 0.335 | |
| Warranty | yrs | 3 years | |

Model Selector

| Model | Input Voltage (V) | Output Current (A) | Output Voltage (V) | Positive Logic On/Off | Negative Logic On/Off | Sequencing | Solder Bumping |
|---------------------|-------------------|--------------------|--------------------|-----------------------|-----------------------|------------|----------------|
| iBF05012A006V-003-R | 2.4 - 5.5 | 12 | 0.6 - 3.63 | - | Yes | - | EPC |
| iBF05012A006V-007-R | 2.4 - 5.5 | 12 | 0.6 - 3.63 | - | Yes | - | LGA |
| iBF12012A007V-001-R | 4.5 - 14 | 12 | 0.7 - 5.5 | - | Yes | Yes | EPC |
| iBF12012A007V-003-R | 4.5 - 14 | 12 | 0.7 - 5.5 | - | Yes | - | EPC |
| iBF12012A007V-007-R | 4.5 - 14 | 12 | 0.7 - 5.5 | - | Yes | - | LGA |

Preferred Model

Outline Drawing (EPC Type)



Pinout

| PIN | Function | PIN | Function |
|-----|----------|-----|-----------|
| 1 | ON / OFF | 6 | VOUT |
| 2 | VIN | 7 | SENSE (+) |
| 3 | Reserved | 8 | Reserved |
| 4 | GND | 9 | PWR GOOD |
| 5 | TRIM | 10 | Reserved |

Other Industrial Products

| | |
|---------------|--|
| CC-E | 1.5 - 30W 5, 12, 24 or 48V input isolated DC-DC converters |
| PX | 10 - 60W 12, 24 or 48V input isolated DC-DC converters |
| iAF, iCF, iCG | 3 - 20A DOSA2 non isolated DC-DC converters |

For Additional Information, please visit
<https://product.tdk.com/en/power/>

