TDK

August 2014

Ni-Zn

Material Characteristics

Ferrite for Coil

⚠ REMINDERS FOR USING THESE PRODUCTS

Please be sure to read this manual thoroughly before using the products.

The products listed on this catalog are intended for use in general electronic equipment (AV equipment, telecommunications equipment, home appliances, amusement equipment, computer equipment, personal equipment, office equipment, measurement equipment, industrial robots) under a normal operation and use condition.
The products are not designed or warranted to meet the requirements of the applications listed below, whose performance and/or quality require a more stringent level of safety or reliability, or whose failure, malfunction or trouble could cause serious damage to society, person or property.
When using the products for specific purposes, please first make confirmations in areas such as safety, reliability, and quality.
Please understand that we are not in a position to be held responsible for any damage or the like caused by any use exceeding the range or conditions of this specification sheet or by any use in the specific applications.

(1) Aerospace/Aviation equipment
(2) Transportation equipment (electric trains, ships, etc.)
(3) Medical equipment
(4) Power-generation control equipment
(5) Atomic energy-related equipment
(6) Seabed equipment
(7) Transportation control equipment
(8) Public information-processing equipment
(9) Military equipment
(10) Electric heating apparatus, burning equipment
(11) Disaster prevention/crime prevention equipment
(12) Safety equipment
(13) Other applications that are not considered general-purpose applications

When using this product in general-purpose standard applications, you are kindly requested to take into consideration securing protection circuit/equipment or providing backup circuits, etc to ensure higher safety.

Contents

Ferrite for Coil

Ni-Zn Material characteristics of Ferrite for Coil

For general purpose

Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
L8F	0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 6	>130	320[1.6kA/m] 330[4kA/m]	130	30	10^5	5.1×10^3
GT2	0.1 to 2	250±25%	<60[2MHz]	9 to 15	>140	310[1.6kA/m] 350[4kA/m]	160	100	10^5	5.1×10^3
GT3	0.4 to 10	120±25%	<100[10MHz]	8 to 18	>250	400[4kA/m]	240	350	10^5	5.2×10^3

High Bs

Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
L7H	0.05 to 1	800±25%	<12[0.05MHz] <80[1MHz]	7 to 15	>180	390[4kA/m]	220	16	10^5	5.1×10^3
L2H	0.05 to 2	400±25%	<15[0.05MHz] <65[2MHz]	15 to 25	>250	430[4kA/m]	240	35	10^5	5.1×10^3
L20H	0.05 to 2	400±25%	<60[0.05MHz] <80[2MHz]	13 to 19	>300	480[4kA/m]	340	50	$>10^5$	5.2×10^3
L11H	0.05 to 3	300±25%	<30[0.05MHz] <60[3MHz]	20 to 30	>250	470[4kA/m]	340	60	$>10^5$	5.2×10^3
L9H	0.05 to 3	200±25%	<35[0.05MHz] <65[3MHz]	20 to 30	>300	480[4kA/m] 500[12kA/m]	280	64	10^5	5.2×10^3

Low temperature coefficient

Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
L6	0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 3	>100	280[1.6kA/m] 290[4kA/m]	105	16	10^5	5×10^3
GT1	0.1 to 1.5	500±25%	<350[1.5MHz]	0 to 2	>120	300[1.6kA/m] 330[4kA/m]	90	55	$>10^5$	5.1×10^3
L6N	0.1 to 1.5	400±25%	<15[0.1MHz] <50[1.5MHz]	–1 to 1	>180	350[4kA/m]	180	120	$>10^5$	5.2×10^3
GT8	0.1 to 1.5	300±25%	<350[1.5MHz]	0 to 2	>150	260[1.6kA/m]	105	120	$>10^5$	5.1×10^3
GT4	0.5 to 20	70±25%	<350[20MHz]	–1 to 5	>300	360[4kA/m]	260	700	$>10^5$	5×10^3
GT10	0.5 to 30	45±25%	<350[30MHz]	–5 to 5	>300	320[4kA/m]	250	950	$>10^5$	5×10^3
GT6	10 to 80	12±25%	<700[80MHz]	–10 to 10	>300	190[4kA/m] 230[8kA/m]	160	2700	$>10^5$	4.7×10^3
GT9	10 to 80	11±25%	<700[80MHz]	–70 to –30	>300	218[4kA/m] 220[16kA/m]	130	2800	$>10^5$	4.2×10^3

Stress-insensitive

Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
T2F	0.1 to 1.5	400±25%	<25[0.1MHz] <50[1.5MHz]	2 to 8	>170	420[4kA/m]	180	95	10^5	5.2×10^3
T6F	0.1 to 50	18±25%	<300[0.1MHz] <1000[50MHz]	55 to 65	>250	320[16kA/m]	57	1350	10^5	5.1×10^3
T7F	0.1 to 100	8±25%	<700[0.1MHz] <1000[100MHz]	15 to 25	>300	220[16kA/m]	130	3500	10^5	5×10^3
T9F	0.1 to 1000	1	—	—	—	—	—	—	10^5	5.3×10^3

Low loss

Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
L17H	0.05 to 0.5	1200±25%	<10[0.05MHz] <45[0.5MHz]	9 to 18	>160	375[4kA/m]	240	10	$>10^5$	5.2×10^3
L18H	0.05 to 1.5	800±25%	<18[0.05MHz] <140[1.5MHz]	12 to 18	>180	420[4kA/m]	280	13	$>10^5$	5.2×10^3
SY20	1 to 5	290±25%	<30[1MHz] <600[5MHz]	15 to 25	>150	330[2kA/m] 345[4kA/m]	250	110	10^5	5.1×10^3
SY22	5 to 15	80	<230[1MHz] <100[10MHz]	25 to 45	>250	310[2kA/m] 330[4kA/m]	200	370	$>10^5$	5.2×10^3

High Q

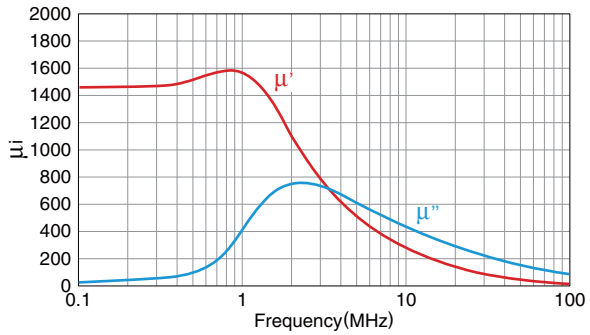
Recommended Material	Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
L5	0.1 to 1.5	750±25%	<15[0.1MHz] <280[1.5MHz]	1 to 3	>120	310[1.6kA/m] 345[4kA/m]	105	40	10^5	5×10^3
GT5	3 to 80	25±25%	<470[80MHz]	30 to 70	>300	300[4kA/m]	220	1100	10^5	5.1×10^3
GT7	10 to 250	9±25%	<1500[250MHz]	100 to 140	>300	180[4kA/m]	110	2900	10^5	5.1×10^3

Ni-Zn Ferrite for Coil(For general purpose) Material list of L8F

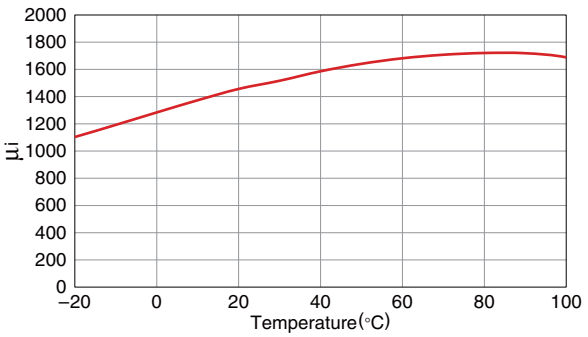
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 6	>130	320[1.6kA/m] 330[4kA/m]	130	30	10^5	5.1×10^3

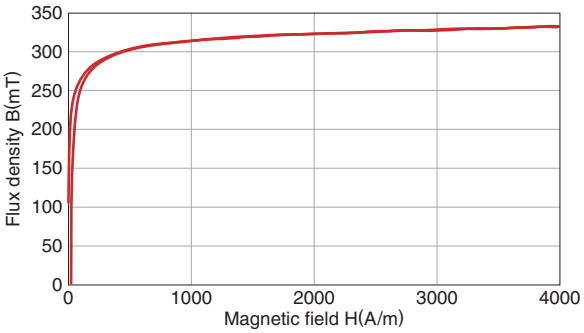
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



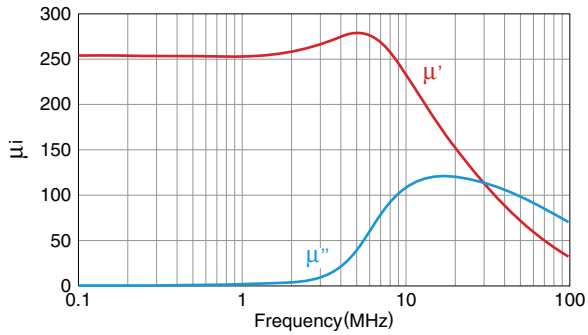
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(For general purpose) Material list of GT2

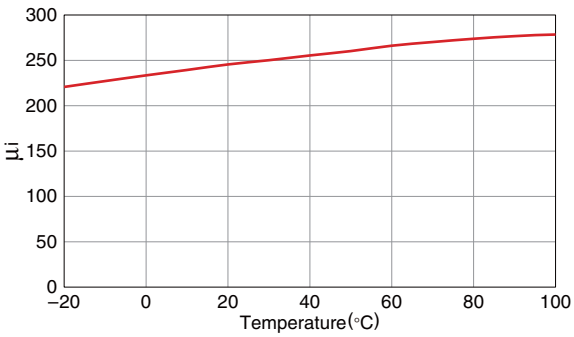
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 2	250±25%	<60[2MHz]	9 to 15	>140	310[1.6kA/m] 350[4kA/m]	160	100	10^5	5.1×10^3

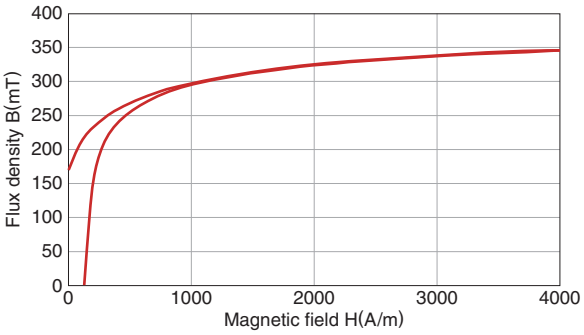
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

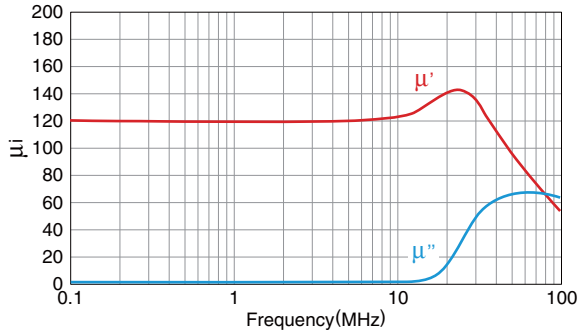


Ni-Zn Ferrite for Coil(For general purpose) Material list of GT3

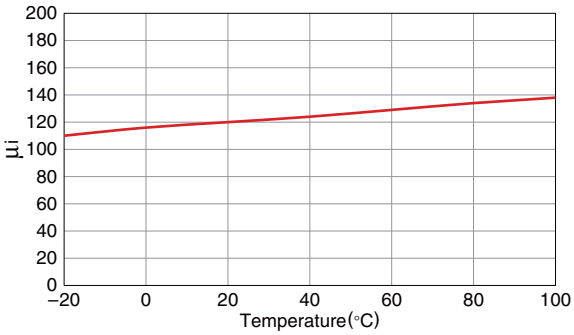
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.4 to 10	120±25%	<100[10MHz]	8 to 18	>250	400[4kA/m]	240	350	10^5	5.2×10^3

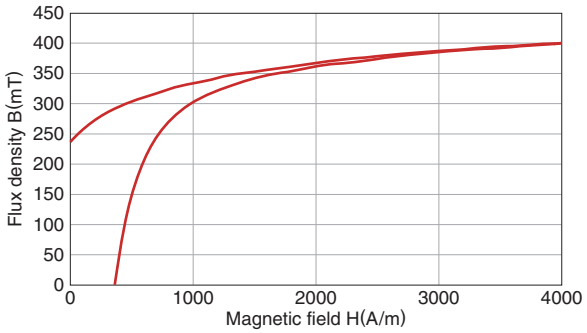
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



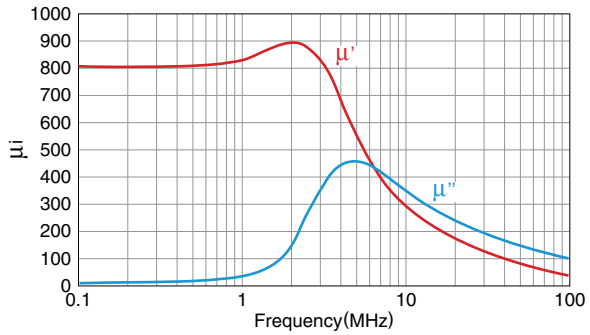
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(High Bs) Material list of L7H

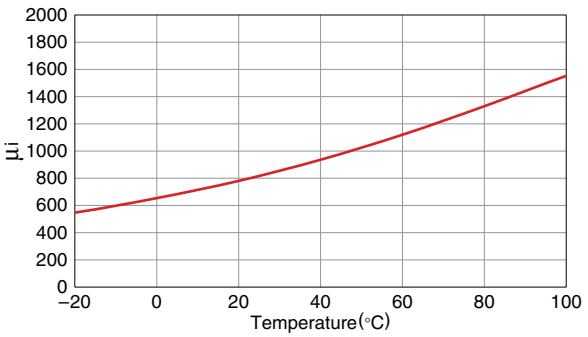
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.05 to 1	800±25%	<12[0.05MHz] <80[1MHz]	7 to 15	>180	390[4kA/m]	220	16	10^5	5.1×10^3

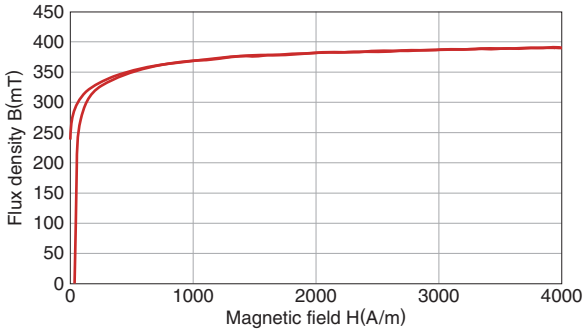
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



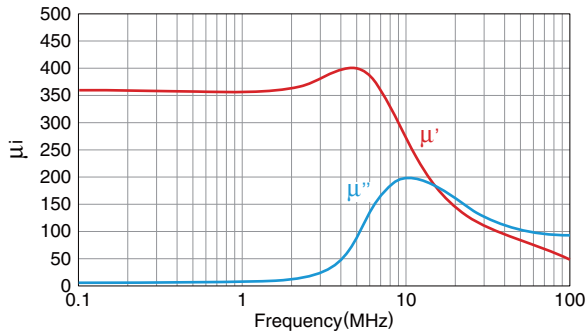
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(High Bs) Material list of L20H

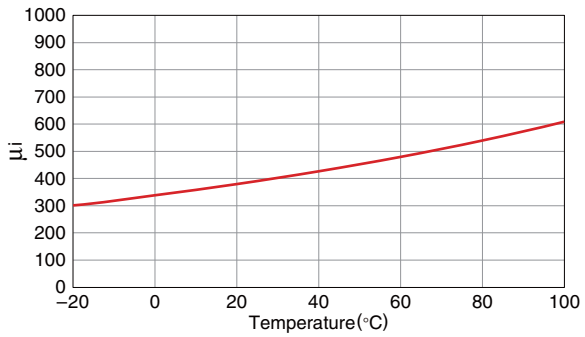
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
0.05 to 2	400±25%	<60[0.05MHz] <80[2MHz]	13 to 19	>300	480[4kA/m]	340	50	$>10^5$	5.2×10^3

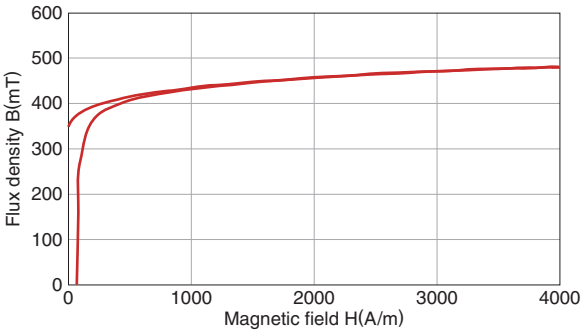
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)



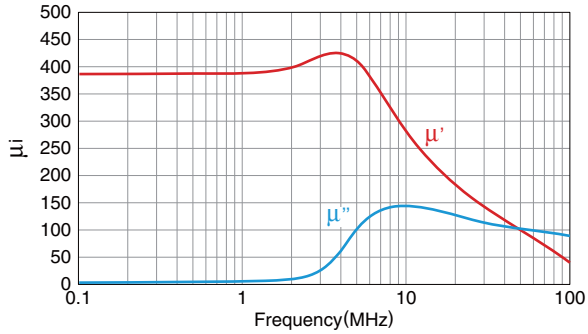
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(High Bs) Material list of L2H

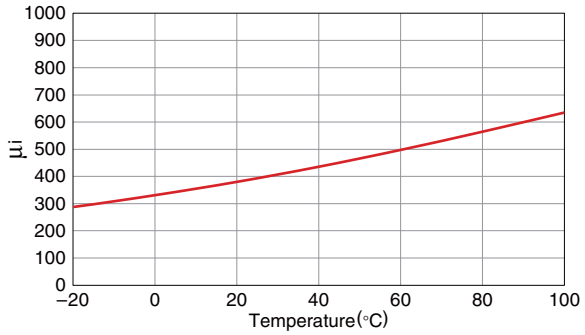
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.05 to 2	400±25%	<15[0.05MHz] <65[2MHz]	15 to 25	>250	430[4kA/m]	240	35	10^5	5.1×10^3

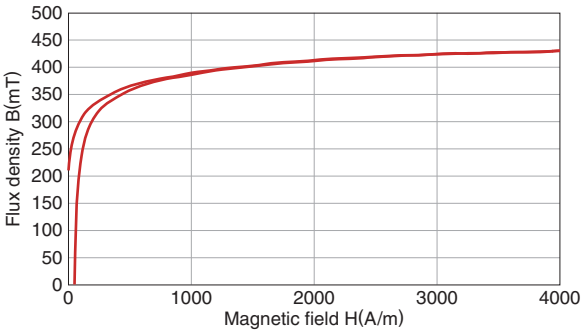
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

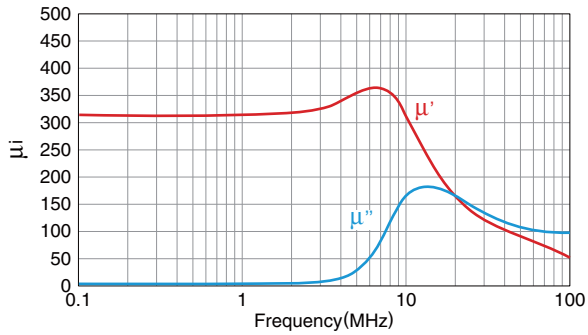


Ni-Zn Ferrite for Coil(High Bs) Material list of L11H

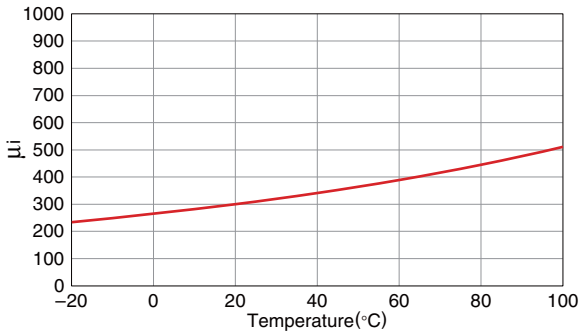
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.05 to 3	300±25%	<30[0.05MHz] <60[3MHz]	20 to 30	>250	470[4kA/m]	340	60	$>10^5$	5.2×10^3

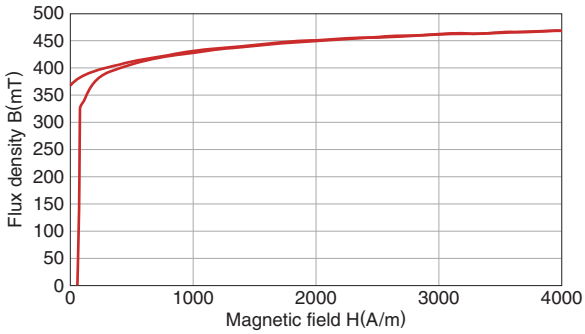
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



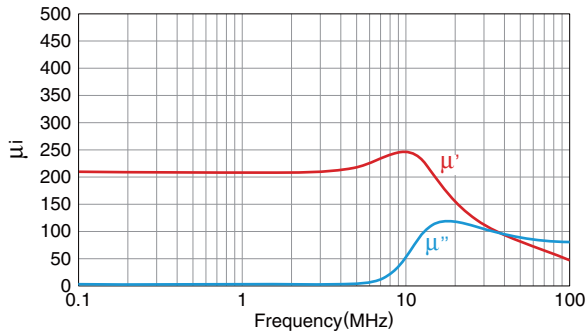
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(High Bs) Material list of L9H

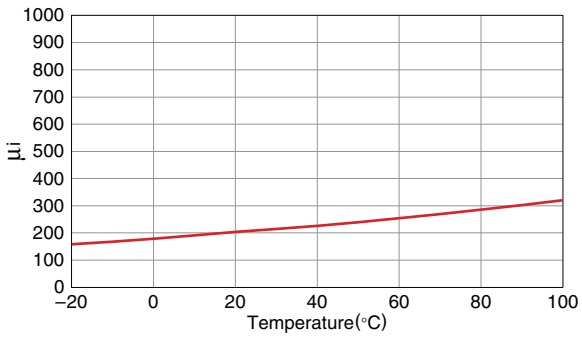
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.05 to 3	200±25%	<35[0.05MHz] <65[3MHz]	20 to 30	>300	480[4kA/m] 500[12kA/m]	280	64	10^5	5.2×10^3

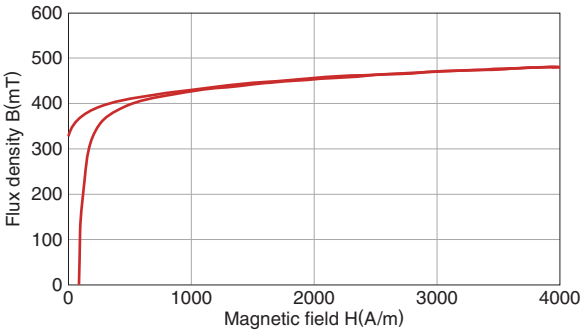
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

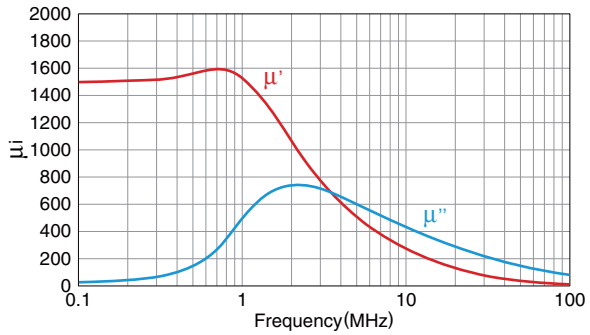


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of L6

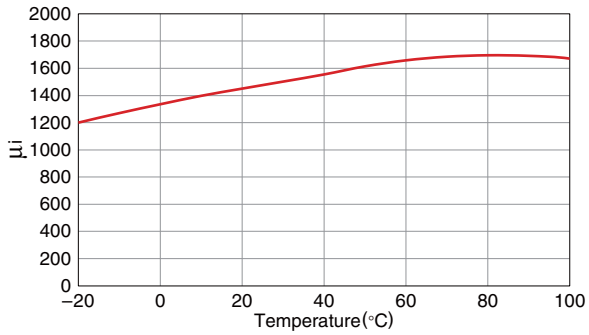
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.01 to 0.5	1500±25%	<10[0.01MHz] <60[0.5MHz]	1 to 3	>100	280[1.6kA/m] 290[4kA/m]	105	16	10^5	5×10^3

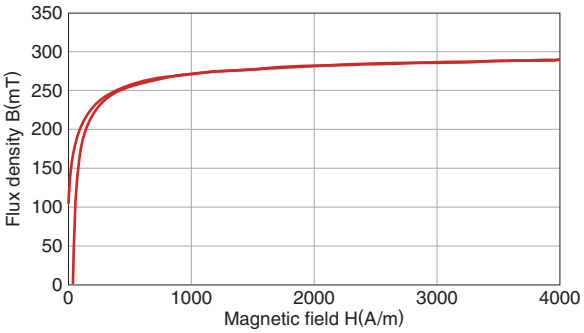
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

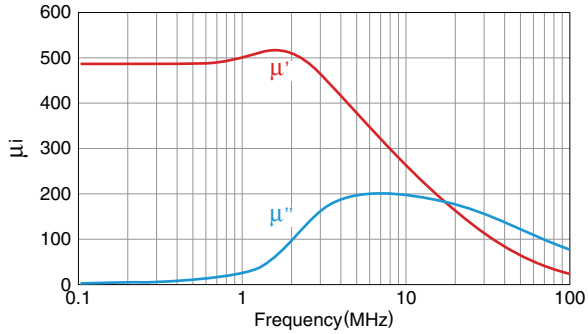


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT1

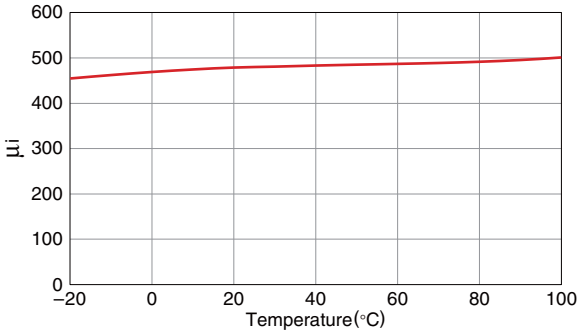
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
0.1 to 1.5	500±25%	<350[1.5MHz]	0 to 2	>120	300[1.6kA/m] 330[4kA/m]	90	55	$>10^5$	5.1×10^3

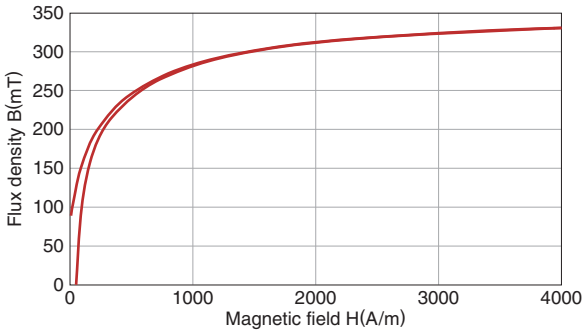
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

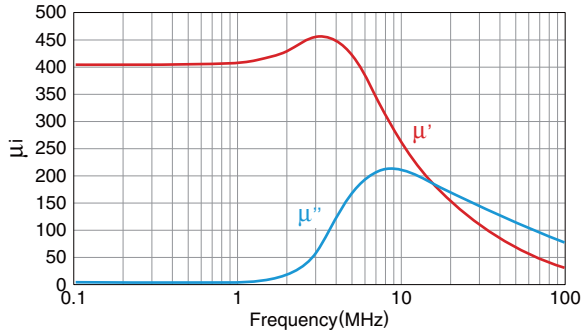


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of L6N

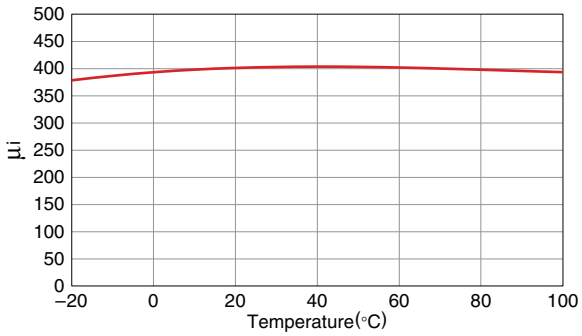
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 1.5	400±25%	<15[0.1MHz] <50[1.5MHz]	−1 to 1	>180	350[4kA/m]	180	120	$>10^5$	5.2×10^3

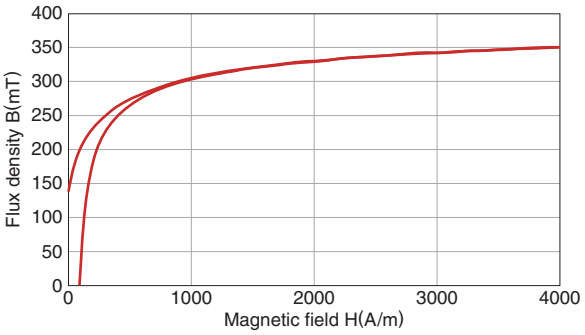
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

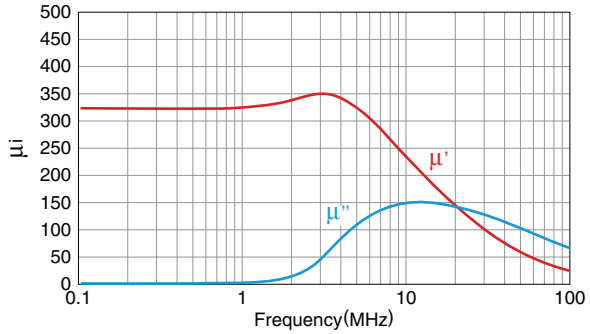


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT8

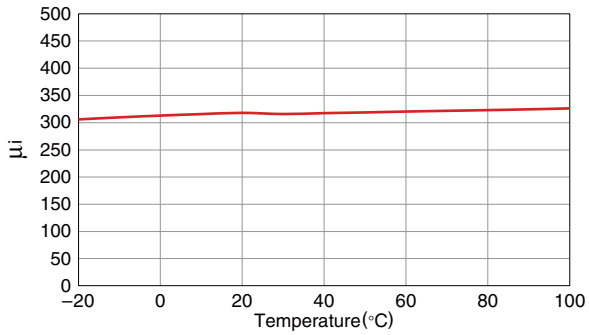
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 1.5	300±25%	<350[1.5MHz]	0 to 2	>150	260[1.6kA/m]	105	120	$>10^5$	5.1×10^3

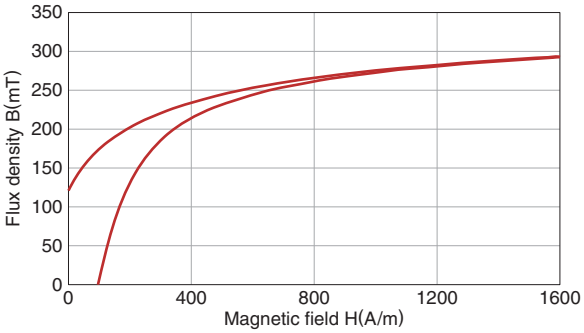
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)

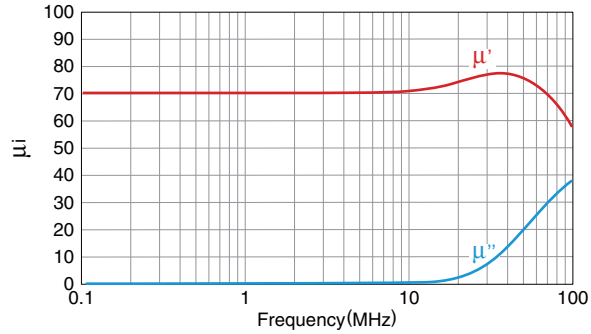


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT4

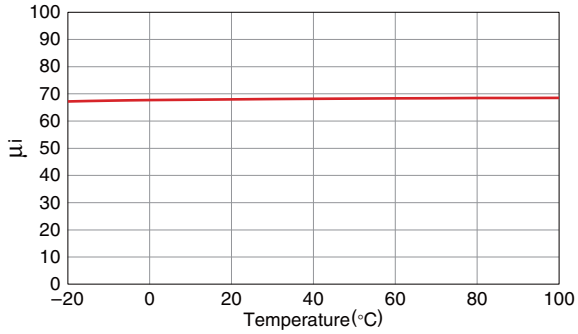
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.5 to 20	70±25%	<350[20MHz]	−1 to 5	>300	360[4kA/m]	260	700	$>10^5$	5×10^3

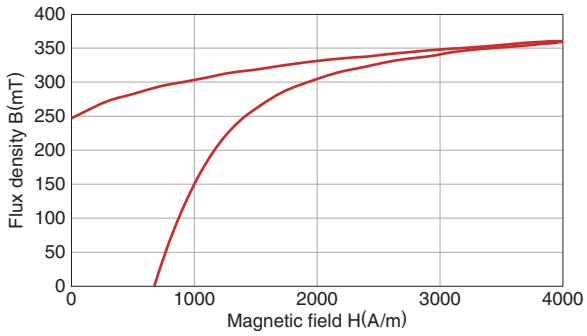
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)



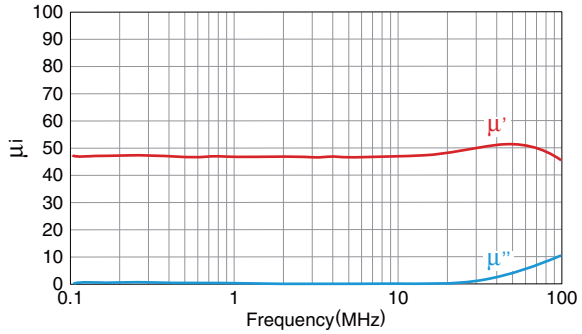
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT10

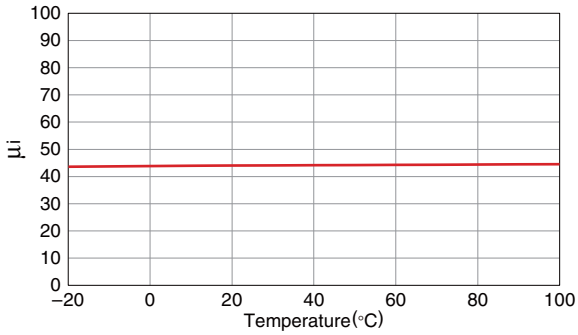
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.5 to 30	45±25%	<350[30MHz]	−5 to 5	>300	320[4kA/m]	250	950	$>10^5$	5×10^3

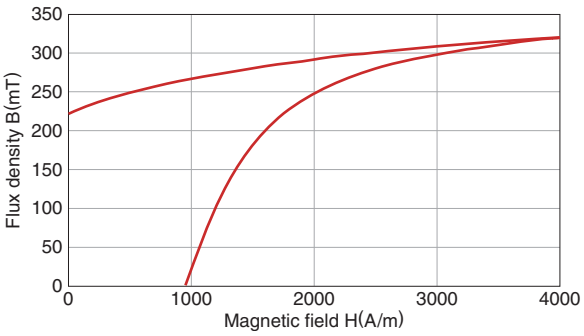
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)

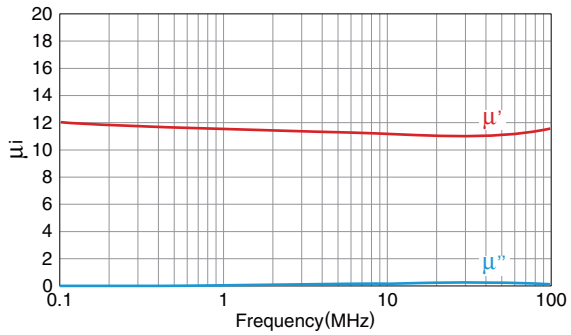


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT6

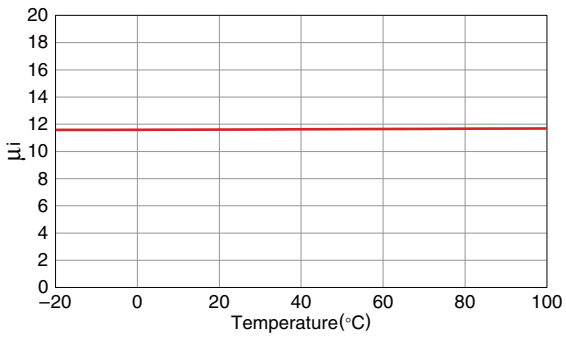
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
10 to 80	12±25%	<700[80MHz]	−10 to 10	>300	190[4kA/m] 230[8kA/m]	160	2700	$>10^5$	4.7×10^3

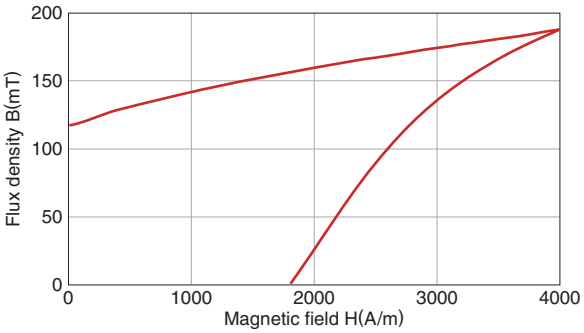
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

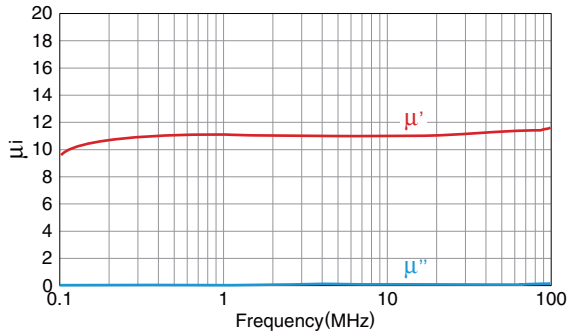


Ni-Zn Ferrite for Coil(Low temperature coefficient) Material list of GT9

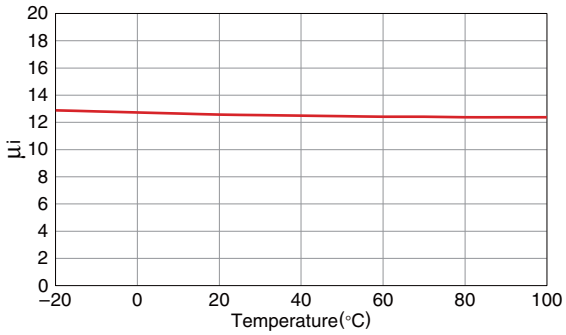
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
10 to 80	11±25%	<700[80MHz]	−70 to −30	>300	218[4kA/m] 220[16kA/m]	130	2800	$>10^5$	4.2×10^3

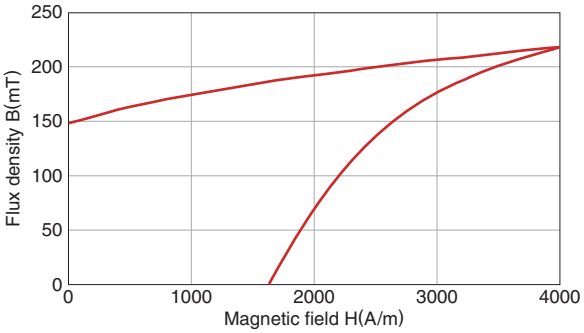
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

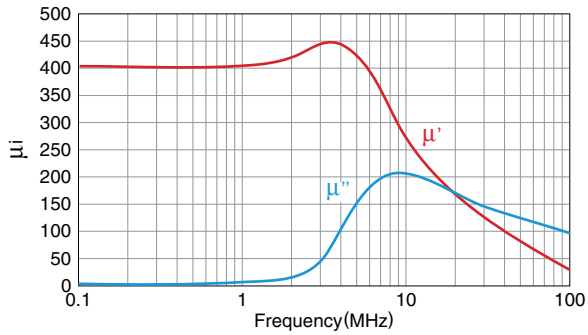


Ni-Zn Ferrite for Coil(Stress-insensitive) Material list of T2F

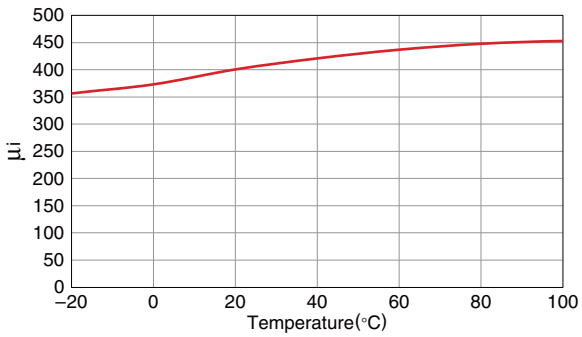
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 1.5	400±25%	<25[0.1MHz] <50[1.5MHz]	2 to 8	>170	420[4kA/m]	180	95	10^5	5.2×10^3

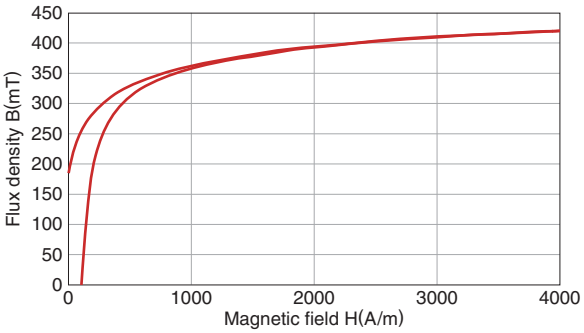
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

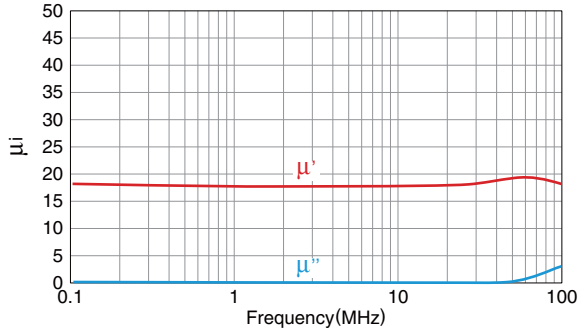


Ni-Zn Ferrite for Coil(Stress-insensitive) Material list of T6F

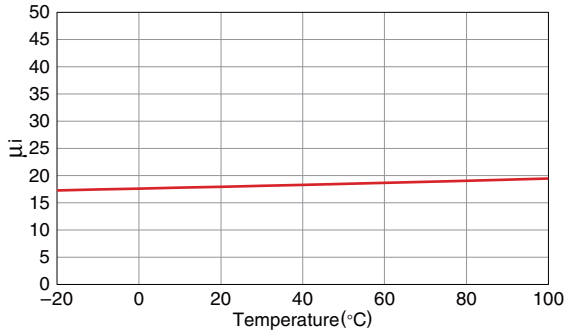
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 50	18±25%	<300[0.1MHz] <1000[50MHz]	55 to 65	>250	320[16kA/m]	57	1350	10^5	5.1×10^3

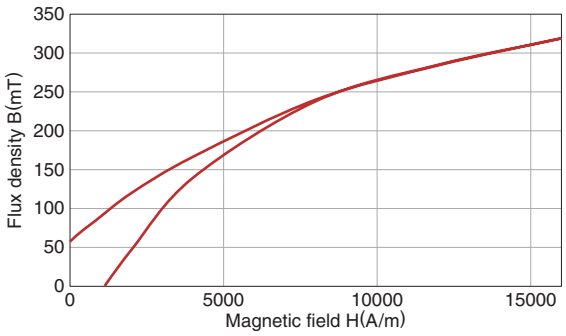
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

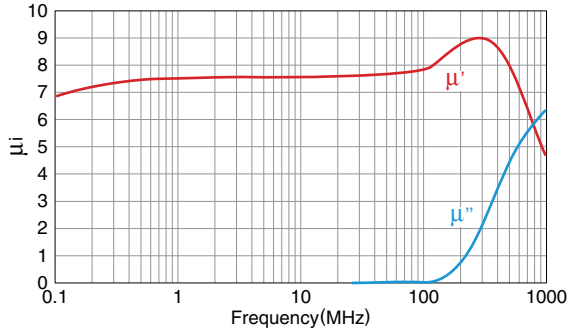


Ni-Zn Ferrite for Coil(Stress-insensitive) Material list of T7F

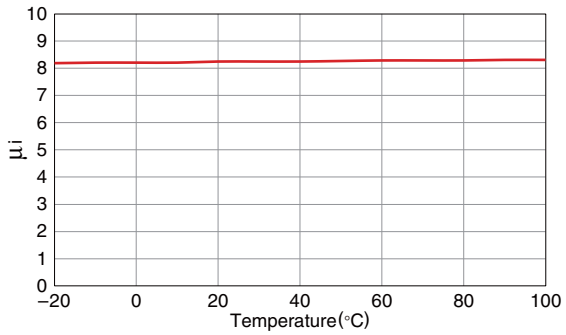
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 100	8±25%	<700[0.1MHz] <1000[100MHz]	15 to 25	>300	220[16kA/m]	130	3500	10^5	5×10^3

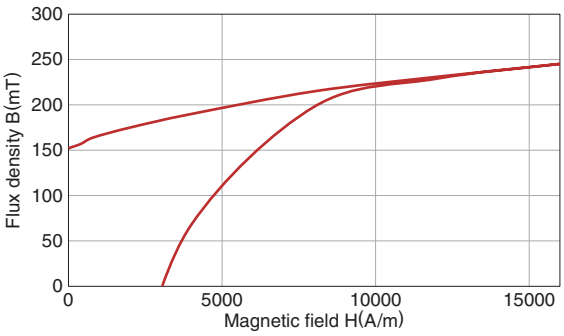
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

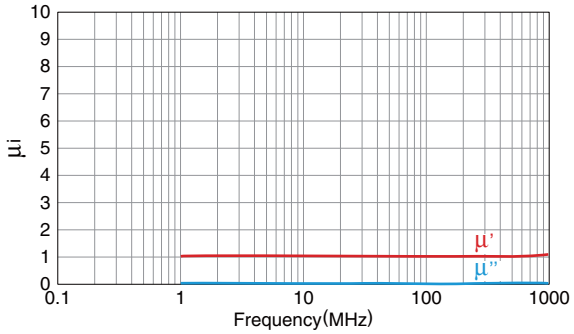


Ni-Zn Ferrite for Coil(Stress-insensitive) Material list of T9F

MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 1000	1	—	—	—	—	—	—	10^5	5.3×10^3

μi frequency characteristics(Typ.)

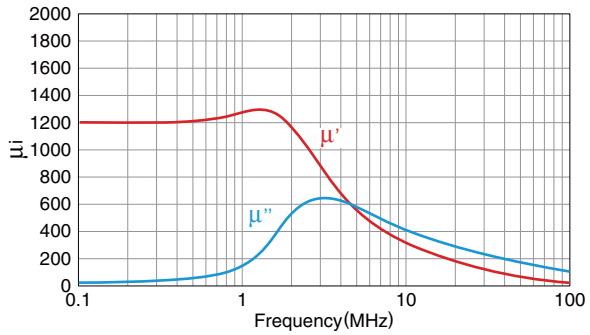


Ni-Zn Ferrite for Coil(Low loss) Material list of L17H

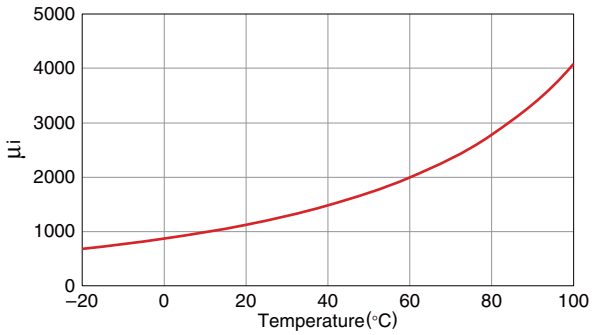
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.05 to 0.5	1200±25%	<10[0.05MHz] <45[0.5MHz]	9 to 18	>160	375[4kA/m]	240	10	$>10^5$	5.2×10^3

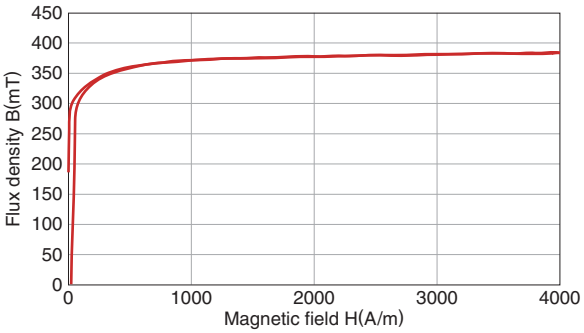
□μi frequency characteristics(Typ.)



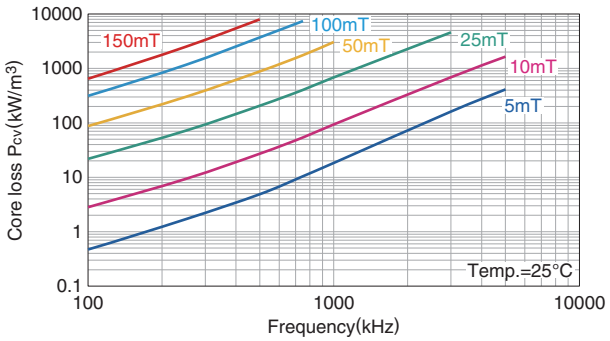
□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



□Core Loss(Typ.)



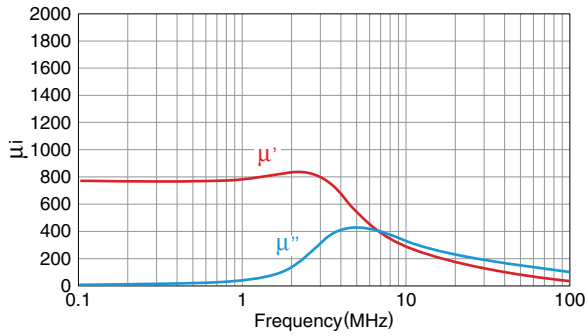
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(Low loss) Material list of L18H

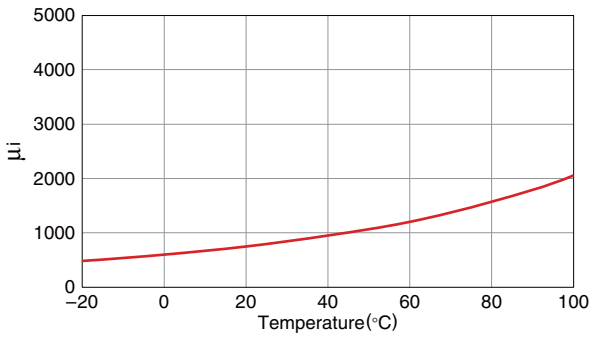
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω - m)	Density db (kg/m³)
0.05 to 1.5	800±25%	<18[0.05MHz] <140[1.5MHz]	12 to 18	>180	420[4kA/m]	280	13	$>10^5$	5.2×10^3

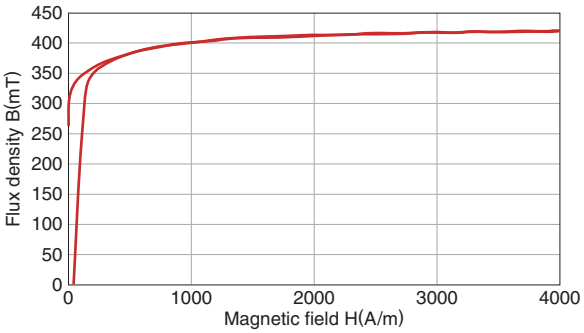
□μi frequency characteristics(Typ.)



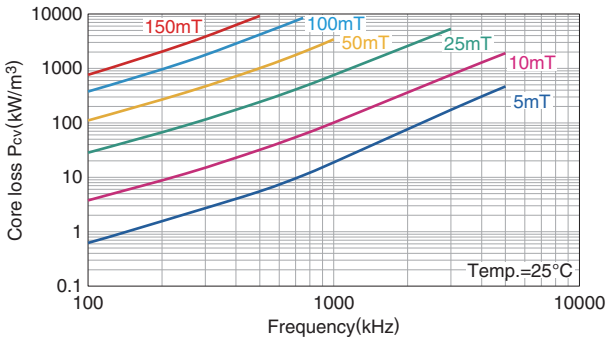
□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



□Core Loss(Typ.)



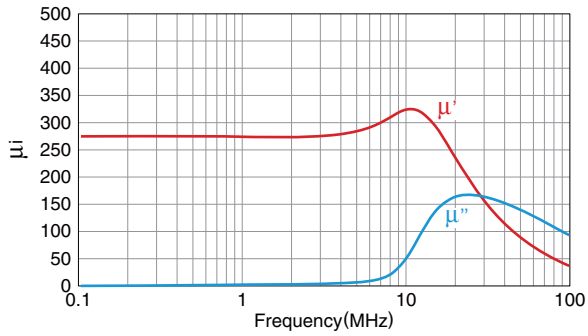
• All specifications are subject to change without notice.

Ni-Zn Ferrite for Coil(Low loss) Material list of SY20

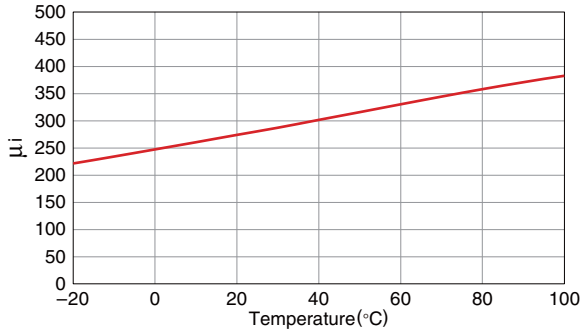
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω-m)	Density db (kg/m³)
1 to 5	290±25%	<30[1MHz] <600[5MHz]	15 to 25	>150	330[2kA/m] 345[4kA/m]	250	110	10^5	5.1×10^3

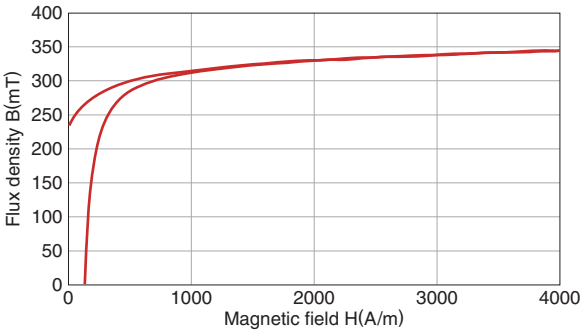
□μi frequency characteristics(Typ.)



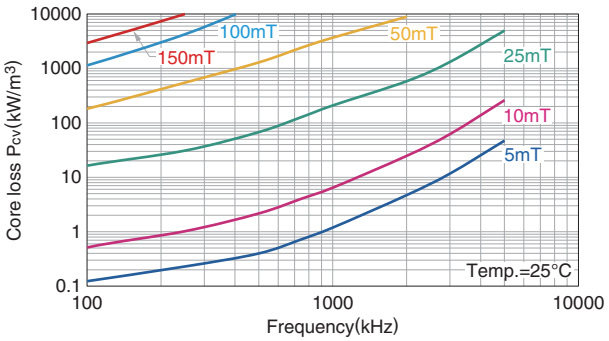
□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



□Core Loss(Typ.)

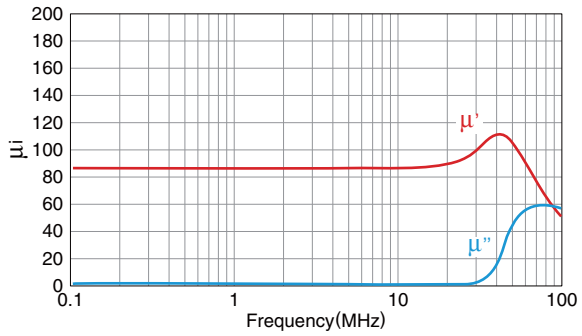


Ni-Zn Ferrite for Coil(Low loss) Material list of SY22

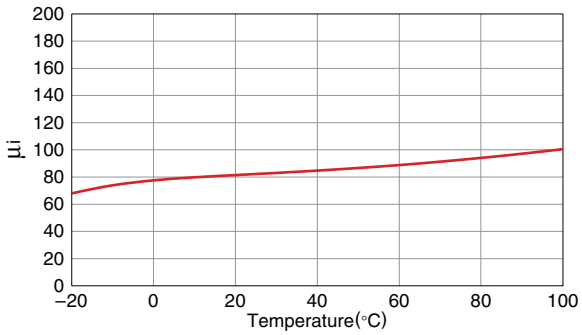
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
5 to 15	80	<230[1MHz] <100[10MHz]	25 to 45	>250	310[2kA/m] 330[4kA/m]	200	370	$>10^5$	5.2×10^3

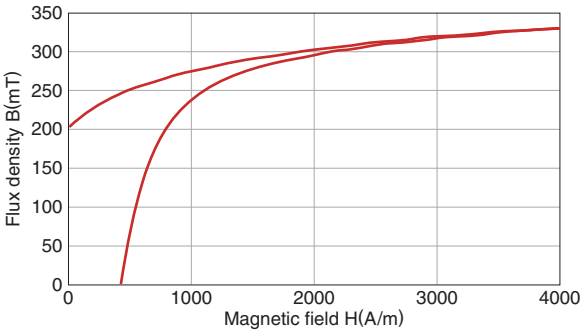
□μi frequency characteristics(Typ.)



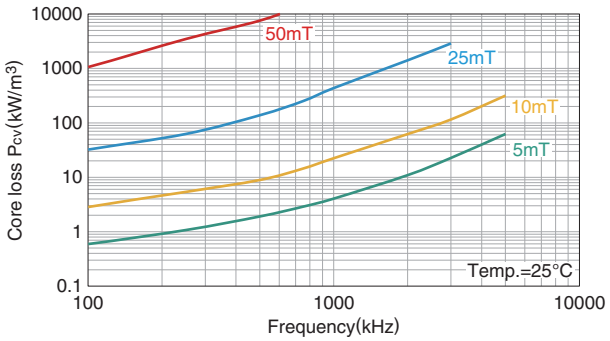
□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)



□Core Loss(Typ.)

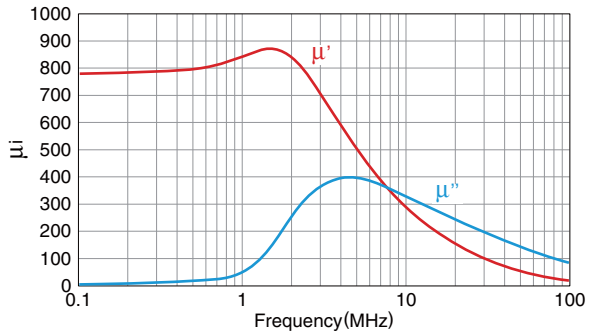


Ni-Zn Ferrite for Coil(High Q) Material list of L5

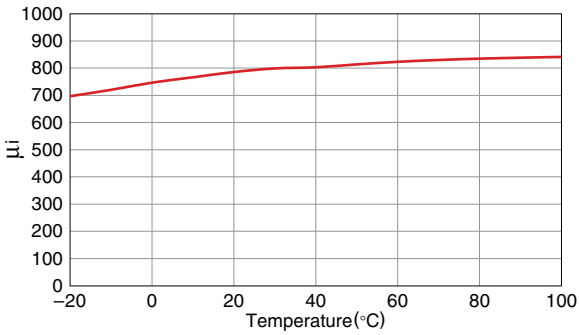
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
0.1 to 1.5	750±25%	<15[0.1MHz] <280[1.5MHz]	1 to 3	>120	310[1.6kA/m] 345[4kA/m]	105	40	10^5	5×10^3

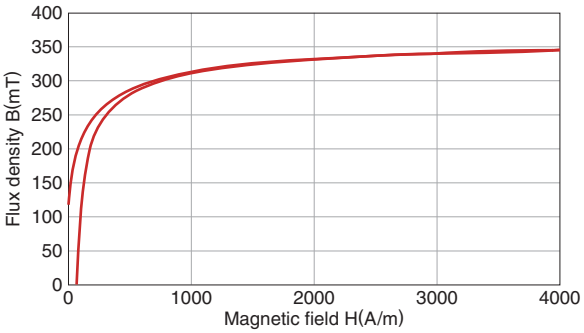
□μi frequency characteristics(Typ.)



□μi temperature characteristics(Typ.)



□B-H temperature characteristics(Typ.)

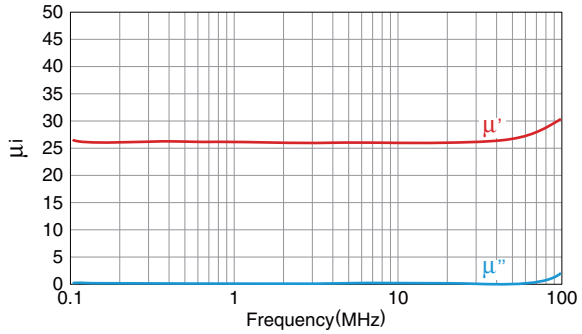


Ni-Zn Ferrite for Coil(High Q) Material list of GT5

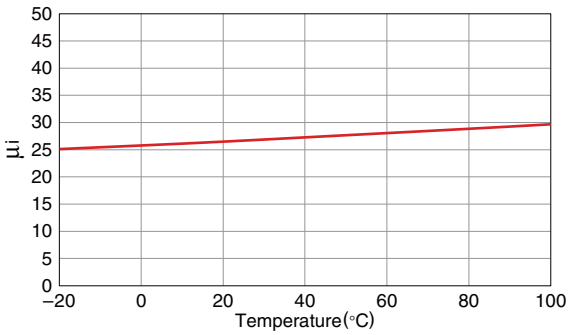
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
3 to 80	25±25%	<470[80MHz]	30 to 70	>300	300[4kA/m]	220	1100	10^5	5.1×10^3

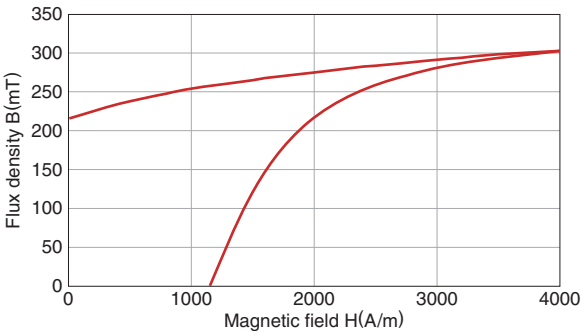
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)

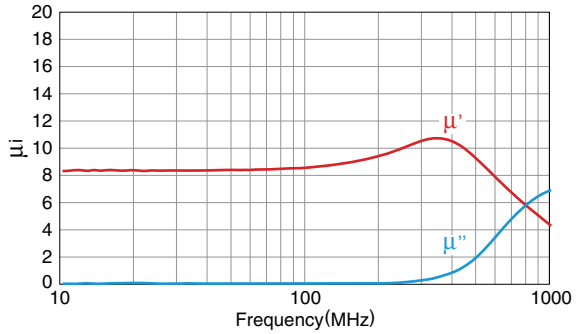


Ni-Zn Ferrite for Coil(High Q) Material list of GT7

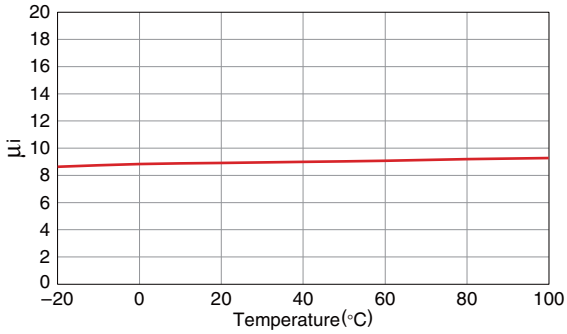
MATERIAL CHARACTERISTICS

Practical frequency (MHz)	Initial permeability μi	Relative loss factor tanδ/μi ×10⁻⁶	Temperature factor of initial permeability αμir ×10⁻⁶/°C [20 to 60°C]	Curie temperature Tc (°C)	Saturation magnetic flux density Bs (mT)	Remanent flux density Br (mT)	Coercive force Hc (A/m)	Electrical resistivity ρv (Ω·m)	Density db (kg/m³)
10 to 250	9±25%	<1500[250MHz]	100 to 140	>300	180[16kA/m]	110	2900	10^5	5.1×10^3

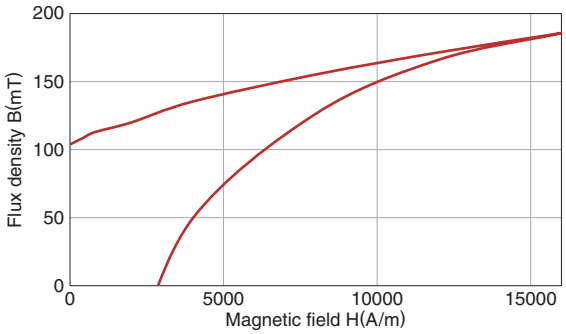
μi frequency characteristics(Typ.)



μi temperature characteristics(Typ.)



B-H temperature characteristics(Typ.)



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