

Ferrites (7000 Series)



Flat Cable Suppression Core (MRP Type)

Split ferrites for EMI suppression on flat cable assemblies.

- Internal floppy disk and hard disk ribbon cables.
- Internal ribbon cables between circuit boards and data connectors.
- Internal ribbon cables with 8, 16, 32 or 64-bit digital signal busses.

Flat Cable Suppression Cores (MRS Type)

Rectangular solid ferrites for EMI suppression on flat cable assemblies.

- Internal floppy disk ribbon cables.
- Internal ribbon cables between circuit boards and data connectors.
- Internal ribbon cables with 8, 16, 32 or 64-bit digital signal busses.

Round Cable Suppression Core (MSC Type)

Enclosures for channel-type EMI-suppressor snaps.

- Internal and external power cables.
- Internal cables between PC boards and data connectors.

Round Cable Suppression Cores (MRC Type)

Enclosures for channel-type EMI-suppressor snaps.

- Internal and external power cables.
- Internal cables between PC boards and data connectors.

Connector Suppressor Elements (MFD Type)

EMI suppression for connectors and dual in-line integrated circuits.

- 9, 15, 25 and 37 pin subminiature "D" connectors.

■ Connector Suppressor Elements (F Type)

Specially designed for Ethernet module jacks or phone jacks.

■ Toroidal Cores (MRT Type)

T-type ring cores for coupling transformers and balancing coils, fixed coils and filter coils.

■ Sleeve Cores (MRI Type)

Produced for assembling cable wire and making MATV CATV.

- Internal and external computer data and power cables.

■ Wound Chip Beads (MBC Type)

For computer products (mother board, hard disk, TV card, etc.); communication products (pager, cordless phone, etc.); modems, OA products, power suppliers, etc.

Counter-measures for complying with CE, FCC, or VCCI radiated emissions.

■ Multi-line Suppressor Beads (SH Type)

- Filtering of power input pins of oscillators or logic devices using high speed docks.
- Filtering of low-frequency input/output signal entering/exiting shielded enclosures.
- High frequency filtering of medium speed docks and video signals.
- Preventing oscillation in high-frequency amplifiers.

■ Wide Band Choke (7R61 Series)

Mainly used in PC boards to filter EMI from the outside.

- High-performance medium-current DC power and signal filtering.

■ Rod Cores (R Type)

For coils which do not require adjustments as well as for magnetic shielding.

■ Balun Cores (RID, RHH, R4H Types)

For wide-band transformers that provide balance to unbalanced transformers. Also used in the input circuits for TV and FM tuners, and in CATV, MATV networks and installations.

■ Multi-layer Chip Beads (FBM Type)

EMI suppression for various electric equipment by the addition of impedance to the circuit. Particularly effective with unstable grounding. High-frequency EMI prevention of computers, printers, VCRs, TVs and portable telephones.

■ Multi-layer Chip Inductors (FLM Type)

EMI suppression for various electric equipment by the addition of impedance to the circuit. Suitable for all computer-related products. For composing different LC filters with capacitors to modify signal wave-form, such as TV-out in a notebook computer or audio-out in a CD-ROM circuit.

■ Wound Chip Inductors (FLC Type)

Used for computer products (hard disks, floppy disks, etc.), communication products (cordless phones, etc.), modems, OA products, TV sets, VCRs, etc.

- Counter-measures for complying with CE, FCC, VDE or VCCI radiated emissions.
- High resistance to heat and humidity as well as resistance to mechanical shocks and pressure.
- Accurate dimensions for automatic surface mounting.

■ Common Mode Choke & SMD Power Choke

Used for prevention of common mode noise on signals and power lines for computer-related products.

- High impedance for common mode noise and low impedance for differential mode signal.
- Large rated current available.
- Wide-band or sharp-type impedance curve available.
- SMD or DIP types available.

Ferrites

Multilayer Chip Beads (FBM Type)

Ordering Code, Shape & Dimensions
Electrical Characteristics
Features, FBM-11 Type Vs FMB-10 Type
FBM-11-1608 Type, Typical Electrical Characteristics Curve
FBM-10-1608 Type, Typical Electrical Characteristics Curve
FBM-11-2012 Type, Typical Electrical Characteristics Curve
FBM-10-2012 Type, Typical Electrical Characteristics Curve
FBM-11-3216 Type, Typical Electrical Characteristics Curve
FBM-10-3216 Type, Typical Electrical Characteristics Curve
-3225
FBM-11-4516 Type, Typical Electrical Characteristics Curve
-4532
High Current Type, Typical Electrical Characteristics Curve
FBM-11-1005 Type, Typical Electrical Characteristics Curve
Packaging
Reliability Test

Multilayer Chip Inductors (FLM Type)

Ordering Code, Shape & Dimensions
FLM-1608 Type, Electrical Characteristics
FLM-2012 Type, Electrical Characteristics
FLM-3216 Type, Electrical Characteristics
Packaging
Reliability Test

Ultra High Frequency Multilayer Chip Inductors (HLM Type)

Features, Ordering Code, Shape & Dimensions
HLM-1608 Type, Electrical Characteristics
Characteristics Curve
HLM-2012 Type, Electrical Characteristics
Characteristics Curve

Wound Chip Beads (MBC Type)

Features, Applications
Ordering Code, Shape & Dimensions
Typical Electrical Characteristics Curve
Packaging

Wound Chip Inductors (FLC Type)

Features, Applications
Ordering Code, Shape & Dimensions
FLC-322522 Type, Electrical Characteristics
FLC-453232 Type, Electrical Characteristics
Packaging
Reliability Test

Ultra High Frequency Wound Chip Inductor (HLC Type)

Features, Applications, Ordering Code, Shape & Dimensions
Electrical Characteristics—> HLC-0805
Electrical Characteristics—> HLC-1008
Packaging

Chip Bead Array

Features, Applications, Ordering Code, Shape & Dimensions
Electrical Characteristics, Typical Electrical Characteristics Curve
Reliability Test

Common Mode Choke

Features, Applications, Ordering Code, Ts1206 Series
Xs1208, Xd0708 Series
Xc1060, Xc1270 Series

Smd Power Choke

Features, Applications, Ordering Code, Shape & Dimensions
Electrical Characteristics —> Bs43, Bs54
Electrical Characteristics —> Bs73, Bs75
Electrical Characteristics —> Bs105
Packaging

Wide Band Choke (SH Type)

Ordering Code, Shape, Dimensions & Characteristics

Bead Cores (Radial Taping & Bulk Type)

Ordering Code, Shape, Dimensions & Characteristics

Bead Cores (Axial Taping Type)

Ordering Code, Shape, Dimensions & Characteristics

Table 1 - FERRITE STANDARD CHARACTERISTICS MATERIALS

Property	Initial Permeability	Curie Temperature	Specific Gravity	Loss Factor @ FREQUENCY	Temp. Coef. of Initial Permiability 20-70°C
Unit		°C	g/cm ³	10 ⁻⁶ MHz	10 ⁻⁶ °C
Symbol	μi	T _c	d	1/μiQ	αμir
A6	1800±25%	>100	4.7	75 (0.5)	0-3
A5	1000±25%	>130	4.8	280 (1.0)	2-5
K5	850±25%	>130	4.8	260 (1.0)	3-6
K5B	700±25%	>140	4.8	250 (1.0)	0-7
K2A	350±25%	>150	4.7	60 (2.0)	15-40
K3A	300±25%	>150	4.7	100 (2.0)	4-12
A17	300±25%	>300	4.6	90 (5.0)	0-7
A78	300±25%	>150	4.7	60 (2.0)	15-40
K1C	250±25%	>200	4.7	110 (2.0)	3-10
A8	200±25%	>250	4.7	35 (7.0)	19-32
A3	100±25%	>300	4.4	160 (2.0)	55-130
K8B	55±25%	>300	4.7	400 (2.0)	5.15