

## Wide Band Chokes and Beads

FASTRON's Wide Band Chokes are Ferrite- Beads, wound with tinned copper wire. These Beads are commonly used in signal filtering and it protects against radio frequency interferences to Ic's.

Applications To filter internal and external EMI. Reduction of radiated interference on TV receivers. For all kind of Electronic Circuits. Suppression of Brush-motors and Power Supplies (SMPS)

Technical Data	Impedance, Z	Measured with HP 4286A RF LCR meter or equivalent at frequency fL
	Operating Temperature	06H, Leaded Beads : -55°C to +85°C
		SMD Beads : -40°C to +150°C (Including component self-heating)
	Recommended soldering method	Wave (Leaded) Reflow (SMD)
	Moisture Sensitivity Levels (MSL)	MSL Level 1, indicating unlimited floor life at ≤ 30°C / 85% relative humidity
	Solderability	Using lead free solder (Sn 99.9) at 260°C ± 5°C for 5 ± 0.5 seconds, min 90% solder coverage of metallization Standard: IEC 68-2-20 (Ta)
	Resistance to Soldering Heat	Resistant to $260^{\circ}C \pm 5^{\circ}C$ for $10 \pm 1$ seconds Standard: IEC 68-2-20 (Tb)
	Resistance to Solvent	Resistant to Isopropyl alcohol for 5 $\pm$ 0.5 minutes at 23°C $\pm$ 5°C Standard: IEC 68-2-45
	Climatic Test	Defined by the following standards IEC 68-2-1 for Cold test: -55°C for 96 hours IEC 68-2-2 for Dry heat test: +85°C for 96 hours IEC 60068-2-78 for Humidity test: 40°C at RH 95% for 4 days
	Thermal Shock Test	Temperature cycle : -55°C to +85°C to -55°C Max/Min temperature duration: 15 minutes Temperature transition duration: 5 minutes Cycles: 25 Standard: MIL-STD-202G
	Tensile Strength of Leads (Pull Test)	Components withstand a pulling force of 10N for $10 \pm 1$ seconds IEC 60068-2-21 (Ua <sub>1</sub> )
	Mechanical Shock	Mil-Std 202 Method 213 Condition C 3 axis, 6 times, total 18 shocks 100 G, 6 ms, half-sine
	Vibration	Mil-Std 202 Method 204 20 mins at 5G 10 Hz to 2000 Hz 12 cycles each of 3 orientations

Ordering Code Example: Bead /10-600P-YY

Bead /10 (Model)

600P - YY (Impedance Value) - (Packing Code) Bead /10-600P-02 ⇒

Packing

g Code -	SMD	Leaded
	01 (7") 04 (13") (refer to below SMD Taping)	00 50 - Loose in Box 01 Taped / Reel (refer to Leaded Inductors, Packing Spec fig.3) 02 Taped / Ammopack (refer to Leaded Inductors, Packing Spec fig.2) 51 Taped / Ammopack (refer below Radial Taping)



## Wide Band Chokes and Beads

Pac	king	
Spe	cific	atio

SMD Taping

cation Packing code : 01, 04



Туре	Α	В	С
SMB/001	3.35	4.75	0.29
SMB/002	3.55	9.3	0.27

**Radial Taping** 

Packing code : 51





## **FASTRON's Component Key Characteristics**



Approved according to AEC-Q200



Approved according to AEC-Q200 with High Temperature



Suitable for High Temperature



Part is RoHS conform and Halogen free



Mechanical Shock and Vibration Proof



Designed for High Q-values



Exceptionally High Q-values



Optimized for High Currents



**Optimized for High Voltages** 









1.5 ref

Recommended layout for solder pads

2.7 ref





SMB/002



2.7 ref



Recommended layout for solder pads





Part No	Impedaı Z typ (s	DCR max (Ω)	Rated DC Current max (A)	
SMB/001-999X-YY	56 Ω typ @ 100 MHz	63 Ω typ @ 300 MHz	0.010	5
SMB/002-999X-YY	100 Ω typ @ 100 MHz	112 Ω typ @ 300 MHz	0.015	5

Core Material: Ferrite



Revision date: 15 Aug 2022

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Fastron:

SMB/001-999X-01 SMB/002-999X-01 SMB/002-999X-04 SMB/001-999X-04