# SMD BALUN VERY HIGH FREQUENCY COMMON MODE NOISE SUPPRESSION SERIES SB5

#### **FEATURES**

SB5-T is discontinued. Use this datasheet for reference only.

- Base terminals are treated, allow mounting as is on PCB. High Common Mode Impedance in small sizes
- Very effective for common mode noise suppression in Digital Equipment in which radiation is caused by cables
- No degrading of incoming signal when suppressing noise
- Can be used as a Common mode filter for USB2.0 & IEEE1394

### **ELECTRICAL CHARACTERISTICS**

- Impedance range 90 to 500 @ 100 MHz

120 to 850 @ 300 MHz

- Withstand voltage 100 Volts DC

- Test frequency 100MHz & 300MHz

- Test equipment HP-4291A

- Insulation resistance 100 Meg Ohms min.

### PHYSICAL CHARACTERISTICS

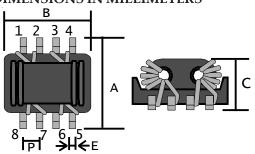
Operating temp.
 Terminal material
 -20°C to +105°C
 Tinned copper

- Packaging T&R with 16 mm tape and 330 mm reel

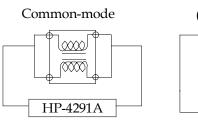
- Construction Wire wound on balun core

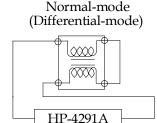
- Quantity per reel SB5-R 1000 pieces SB5-T 3000 pieces

#### **DIMENSIONS IN MILLIMETERS**



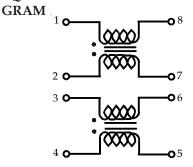
#### **MEASURING CIRCUIT**





## **EQUIVALENT CIRCUIT DIA-**

Sizes	A	В	С	E	P
SB5-R SB5-T	$6.7 \text{ max}.$ $5.0 \pm 0.3$	$6.1 \text{ max}$ $3.5 \pm 0.3$	3.75 max 2.50 max	$0.5 \pm 0.2$ $0.3 \pm 0.2$	$1.27 \pm 0.2$ $0.80 \pm 0.2$



#### **SPECIFICATIONS**

Part	Z @ 100MHz	Z @ 300MHz	Rated Current ( mA )	DCR max	Withstand voltage
Number	(Ω)	(Ω)		(Ω)	(VDC)
SB5-R-120	120 ± 25%	180 typical	500	0.12	100
SB5-R-300	300 ± 25%	470 typical	500	0.12	100
SB5-R-500	500 ± 25%	750 typical	500	0.12	100
SB5-T-90	90 ± 25%	120 typical	500	0.10	100
SB5-T-200	200 ± 25%	280 typical	500	0.12	100
SB5-T-300	300 ± 25%	520 typical	500	0.15	100
SB5-T-500	500 ± 25%	850 typical	500	0.16	100