

Surface Mount Schottky Barrier Rectifiers

(Pb) Lead(Pb)-Free

Features:

- * Low profile package
- * Ideal for automated placement
- * Guard Ring for over voltage protection
- * Low forward voltage drop
- * Component in accordance to RoHS 2002/95/EC

Mechanical Data

- * Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- * Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- * Polarity: Cathode Band
- * Weight: 0.062 grams (approximate)

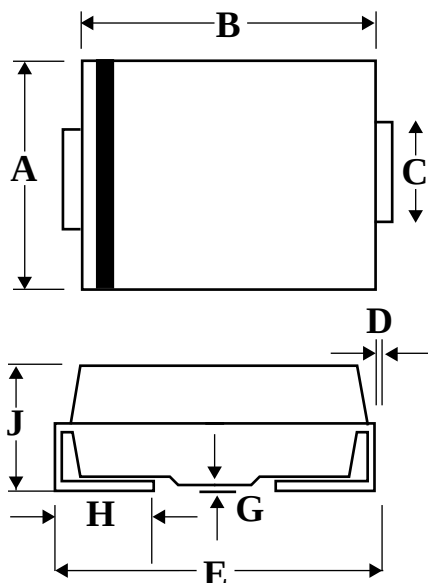
REVERSE VOLTAGE
20 TO 200 VOLTS
FORWARD CURRENT
1.0 AMPERE



SMA(DO-214AC)

SMA Outline Dimension

Unit:mm



SMA		
Dim	Min	Max
A	2.20	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.48	5.59
G	0.10	0.20
H	0.76	1.52
J	1.70	2.62

Maximum Ratings and Electrical Characteristics

(TA=25°C unless otherwise noted)

Characteristic	Symbol	B120	B130	B140	B150	B160	B180	B1100	B1150	B1200	Unit
Maximum Recurrent Peak Reverse Voltage	VRRM	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	VRMS	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	VDC	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	IF	1.0									A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	IFSM	30.0									A
Maximum Instantaneous At 1.0A @Tj=25 C [°]	VF	0.50			0.62		0.83		0.85	0.88	V
Maximum DC Reverse Current @Tj=25 C [°] At Rated DC Blocking Voltage @Tj=100 C [°]	IR	0.5 10					0.2 5			mA	
Typical Junction Capacitance (Note 1)	CJ	70			60		50		35		PF
Typical Thermal Resistance	RθJA RθJC	70 50									°C/W
Operating Temperature Range	TJ	-55 to+125							-55 to+150		°C
Storage Temperature Range	TSTG	-55 to+150									°C

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.

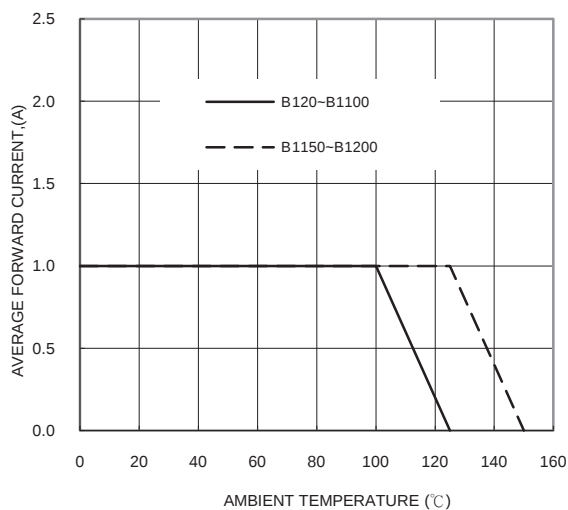


FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

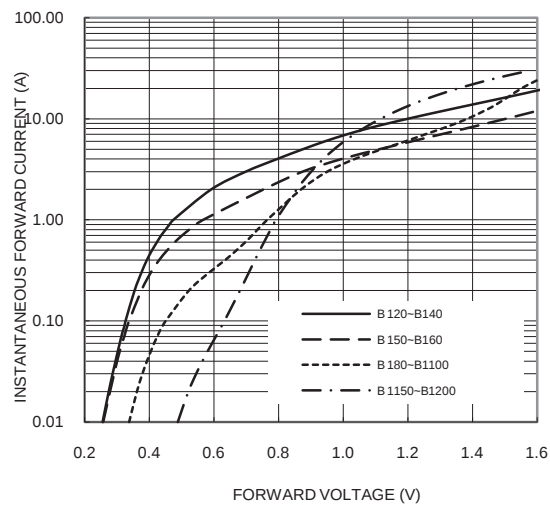


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

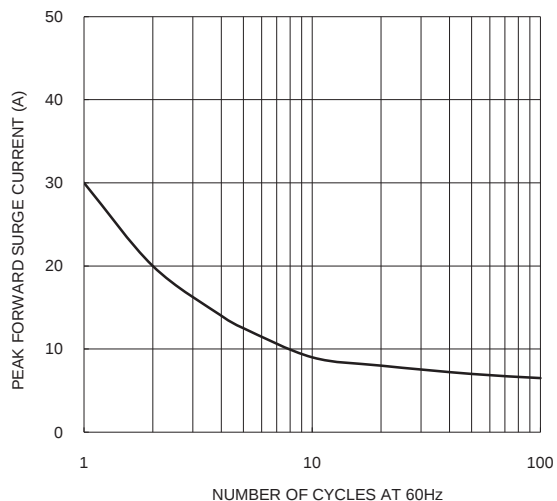


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

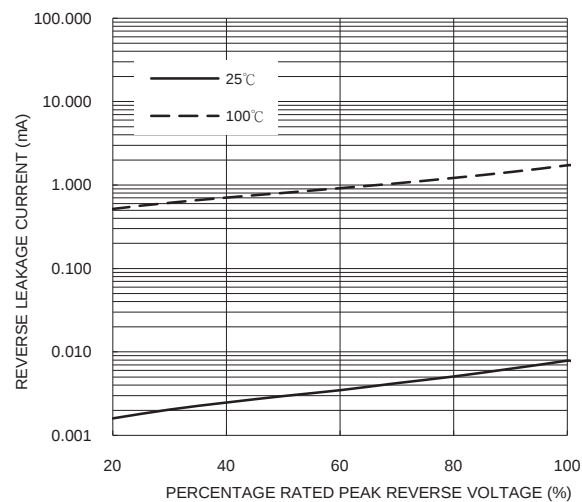


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

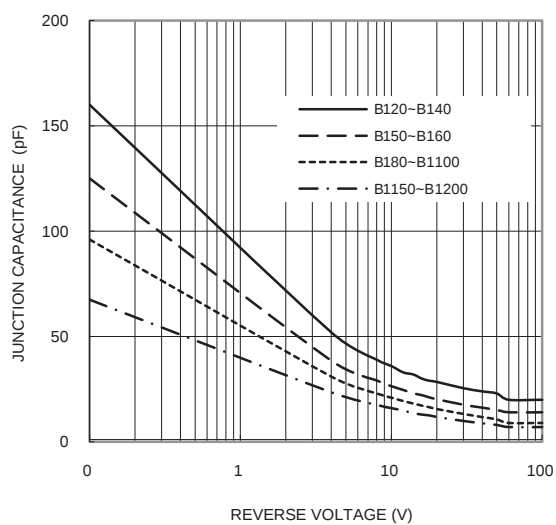


FIG. 5-TYPICAL JUNCTION CAPACITANCE