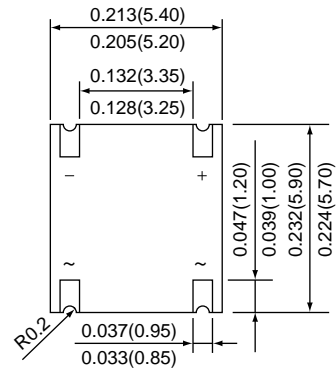


RoHS Compliant Product
A suffix of "-C" specifies halogen-free.



Case : SBCR



● **FEATURES**

- * Internal construction with GPRC (glass passivated rectifier chip)
- * RoHS Compliant
- * Lead less chip form , no lead damage
- * Solder joint , no wire bond & lead frame
- * Low power loss , High efficiency
- * High current capability
- * Low profile package
- * For surface mounted applications
- * Built-in strain relief
- * High surge capability
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **MECHANICAL DATA**

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Tin plated, solderable per MIL-STD-750, Method 2026.
Polarity : Laser Cathode band marking
Weight : 0.07 gram

*Dimensions in inches and (millimeters)

Absolute Maximum Ratings Electrical Characteristics (Ta = 25°C unless otherwise specified)

ITEM	Symbol	SBCR103S	SBCR104S	SBCR105S	SBCR106S	SBCR107S	Unit
Max. repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Max. RMS voltage	VRMS	140	280	420	560	700	V
Max. DC blocking voltage	VDC	200	400	600	800	1000	V
Max. Average Forward Rectified Current @ Ta = 55°C	IF(AV)	1.0					A
Peak forward surge current 8.3ms single half sine-wave Superimposed on rated load (JEDEC method)	IFSM	30					A
Forward voltage IF = 0.4 A IF = 1.0 A	VF	0.9 1.0					V
Max. DC reverse current @Tc = 25°C at rated DC blocking voltage @Tc = 150°C	IR	5 200					µA
Current squared time for fusing (t < 8.3 ms)	I ² t	3.74					A ² s
Typical junction capacitance per element (NOTE 1)	Cj	25					pF
Thermal resistance	Rθ(JA)	110					°C / W
Operating junction and storage temperature Range	TJ, TSTG	-55 to +175					°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
 (2) Thermal resistance, junction to ambient, measured on PC board with 5.0mm² (0.03mm thick) land areas.

RATINGS AND CHARACTERISTIC CURVES SBCR103S THRU SBCR107S

FIG.1 - FORWARD CURRENT DERATING CURVE

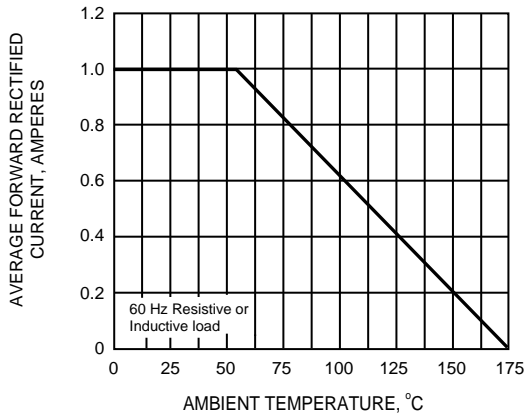


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

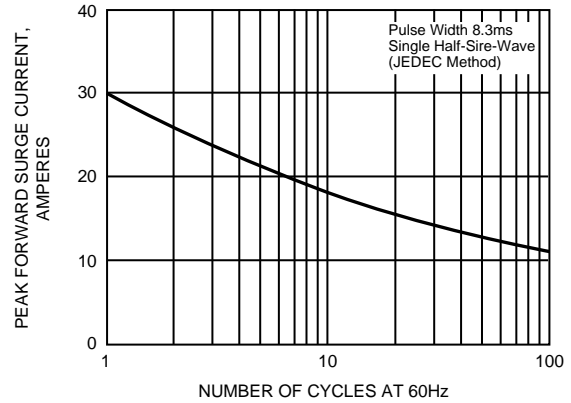


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

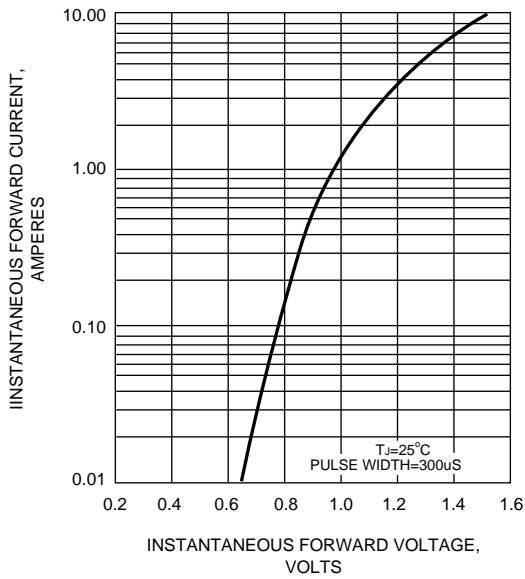


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

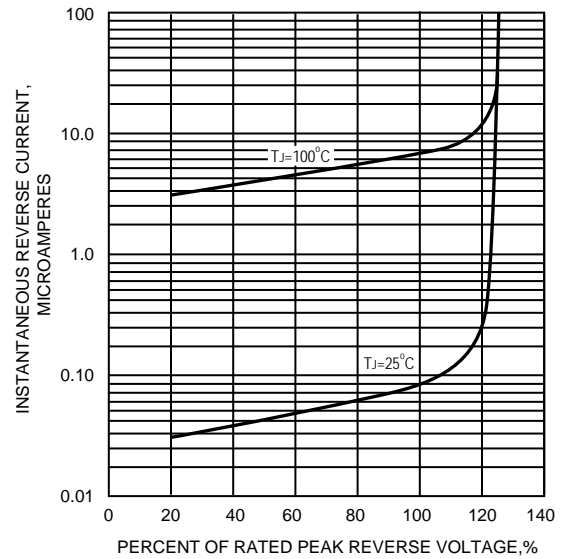


FIG.5 - TYPICAL JUNCTION CAPACITANCE

