

**SM05S THRU SM10S
SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS**

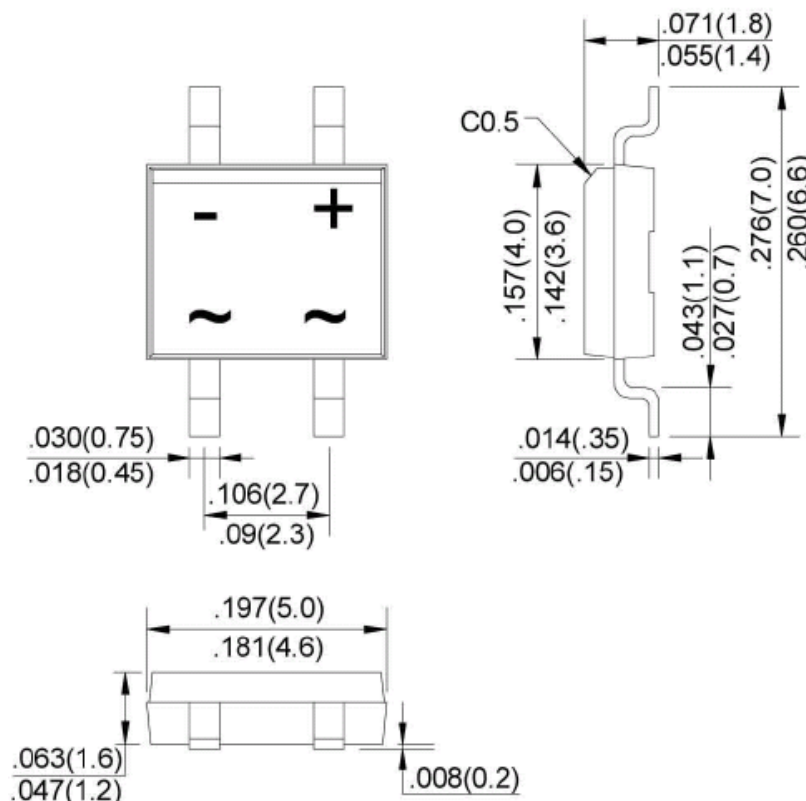
Features:

- Rating to 1000V PRV
- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique results in inexpensive product
- Lead tin plated copper
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request

Mechanical Data:

- Polarity : Symbol molded on body
- Mounting position: Any

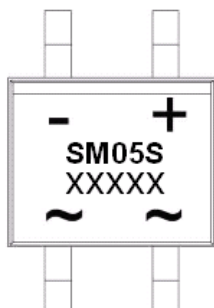
Mechanical Dimensions: In Inches/ mm



BTS

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Marking Diagram:



Where XXXXX is YYWWL

SM05S = Part Name
YY = Year
WW = Week
L = Lot Number

Cautions: Molding resin
Epoxy resin UL: 94V-0

Ordering Information:

Device	Package	Shipping
SM05S THRU SM10S	BTS (Pb-Free)	5000 pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.

Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	SM05S	SM1S	SM2S	SM4S	SM6S	SM8S	SM10S	Unit
Maximum Recurrent Peak Reverse Voltage Maximum DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
Maximum RMS Reverse Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum Average Forward Rectified Current @ $T_A = 40^\circ\text{C}$	I_O	0.8							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Peak Forward Voltage @ $I_F = 0.8\text{A}$	V_{FM}	1.1							V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 125^\circ\text{C}$	I_{RM}	5 500							μA
Typical Junction Capacitance(per leg) (Note 2)	C_J	13							pF
Typical Thermal Resistance (per leg)	$R_{\theta JC}$	75							$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to +150							$^\circ\text{C}$

- Note: 1. Mounted on PC board.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 VDC
3. Thermal resistance junction to case

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FIG.1-FORWARD CURRENT DERATING CURVE

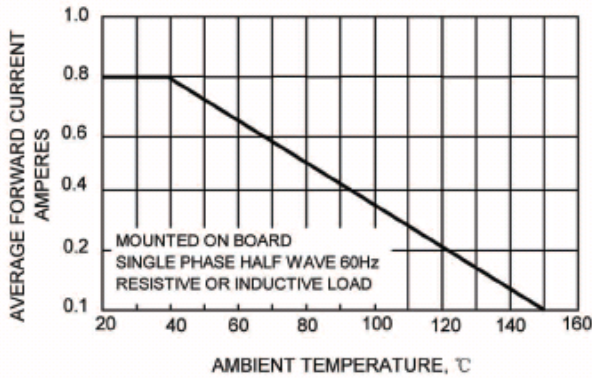


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

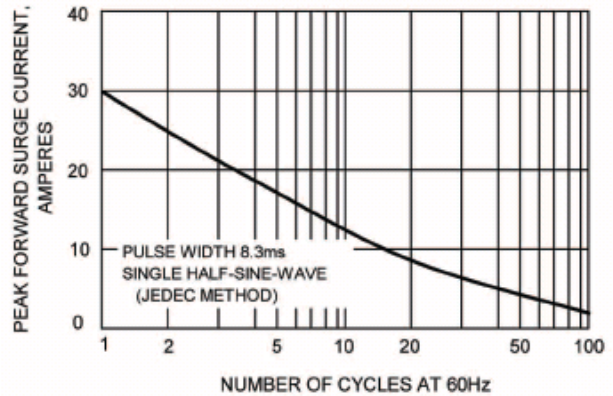


FIG.3-TYPICAL REVERSE CHARACTERISTICS

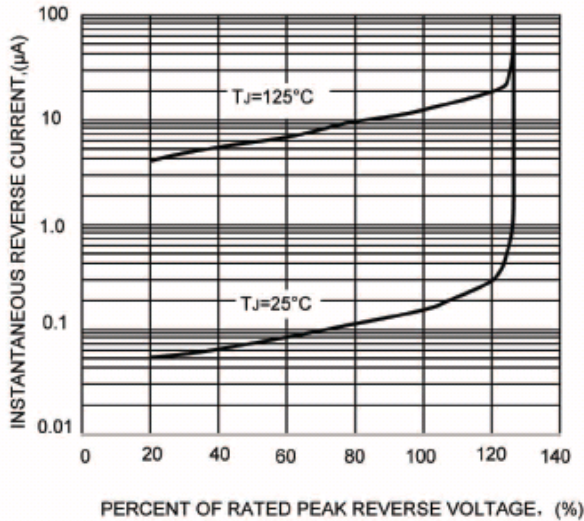


FIG.4-TYPICAL FORWARD CHARACTERISTICS

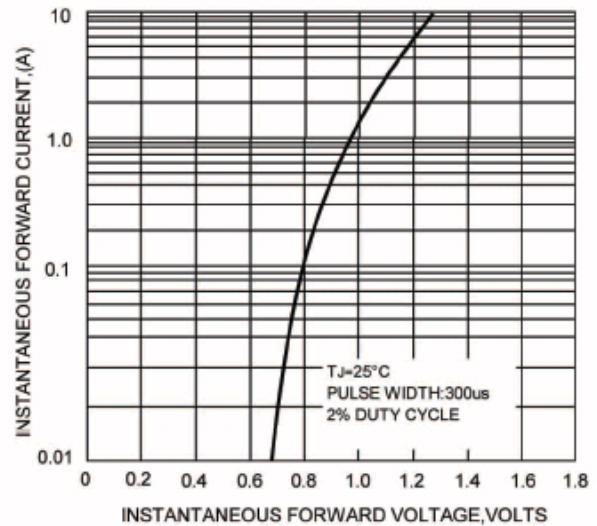
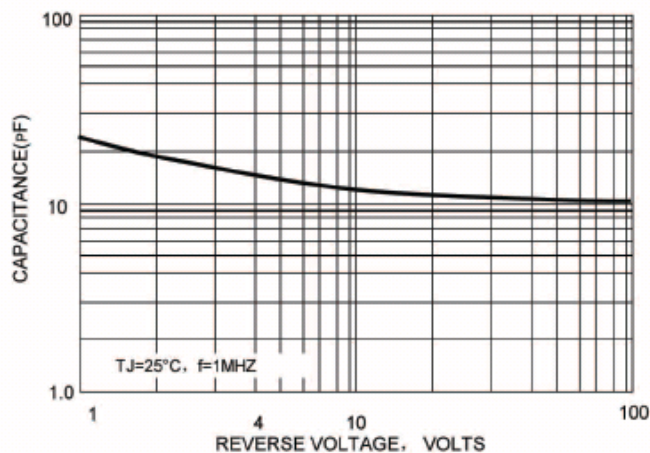


FIG.5-TYPICAL JUNCTION CAPACITANCE





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Green Products

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