

## SM05S THRU SM10S SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

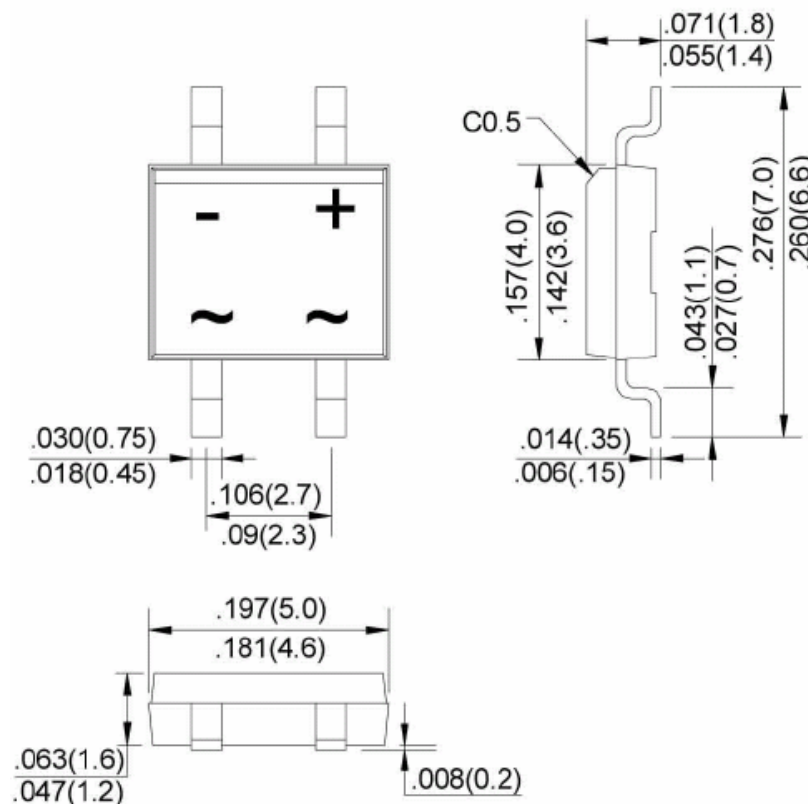
### Features:

- 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:

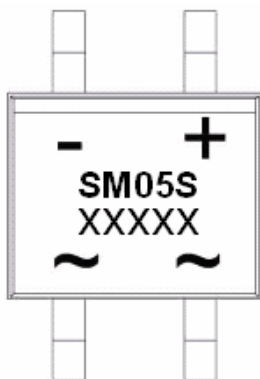
- Polarity : Symbol molded on body
- Mounting position: Any

### Mechanical Dimensions: In Inches/ mm



**BTS**

## Marking Diagram:



Where XXXXX is YYWWL

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

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

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave ,60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	SM05S	SM1S	SM2S	SM4S	SM6S	SM8S	SM10S	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current (Note 1) @TA=40 °C	I(AV)	0.8							A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	IFSM	30							A
Peak Forward Voltage at 0.8A DC	VF	1.1							V
Maximum DC Reverse Current @TJ=25°C at Rated DC Blocking Voltage @TJ=125°C	IR	5.0 500							μA
Typical Junction Capacitance Per Element (Note2)	CJ	15							pF
Typical Thermal Resistance (Note3)	RθJC	75							°C/W
Operating Temperature Range	TJ	-55 to +150							°C
Storage Temperature Range	TSTG	-55 to +150							°C

NOTES:1.Mounted on P.C. board.

2.Measured at1.0MHz and applied reverse voltage of 4.0V DC.

3.Thermal resistance junction to case

FIG.1-FORWARD CURRENT DERATING CURVE

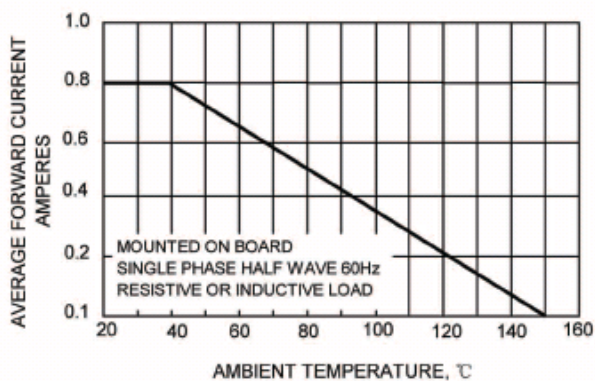


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

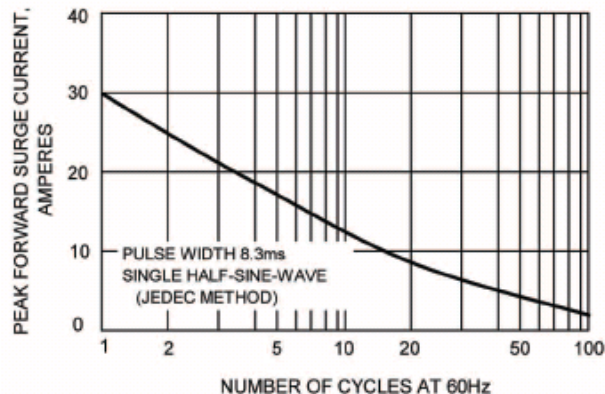


FIG.3-TYPICAL REVERSE CHARACTERISTICS

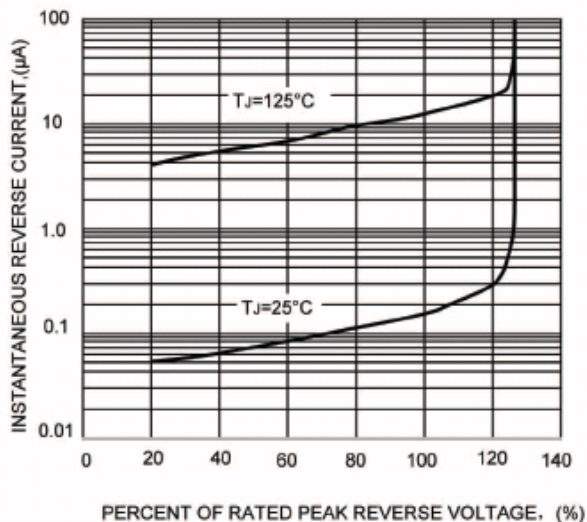


FIG.4-TYPICAL FORWARD CHARACTERISTICS

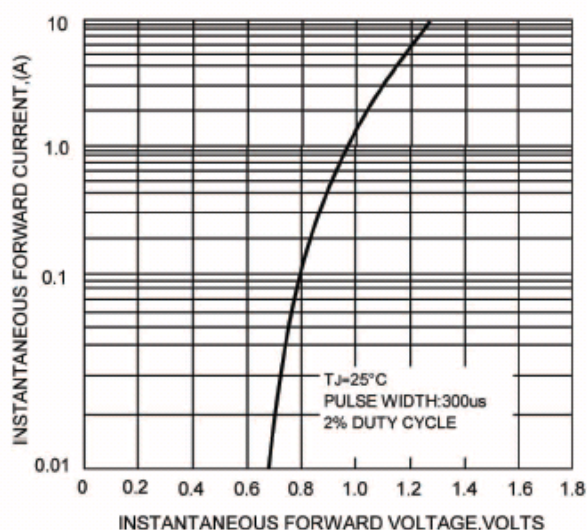
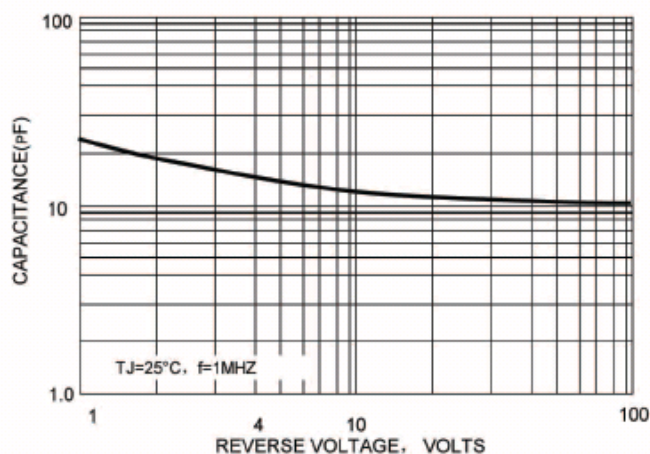


FIG.5-TYPICAL JUNCTION CAPACITANCE



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