Technical Data
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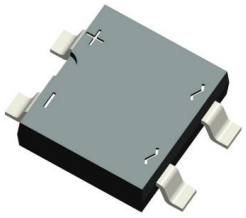
SM05S THRU SM10S
SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS

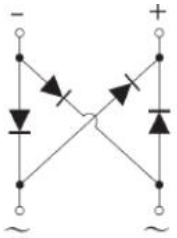


BTS

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

Circuit Diagram



Mechanical Data

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

Maximum Ratings @T_A=25°C unless otherwise specified

Type Number	Symbol	SM05S	SM1S	SM2S	SM4S	SM6S	SM8S	SM10S	Units
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	50	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	35	70	140	280	420	480	700	V
Average Rectified Output Current @T_A=40°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

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RoHS

Electrical Characteristics:@T_A=25˚C unless otherwise specified

Type Number	Symbol	SM05S	SM1S	SM2S	SM4S	SM6S	SM8S	SM10S	Units
Forward Voltage per element @I_F =0.8A	V_{FM}	1.1							V
Peak Reverse Current @T_A = 25˚C At Rated DC Blocking Voltage @T_A = 125˚C	I_R	5 500							μA
Typical Junction Capacitance (Note 1)	Cj	13							pF

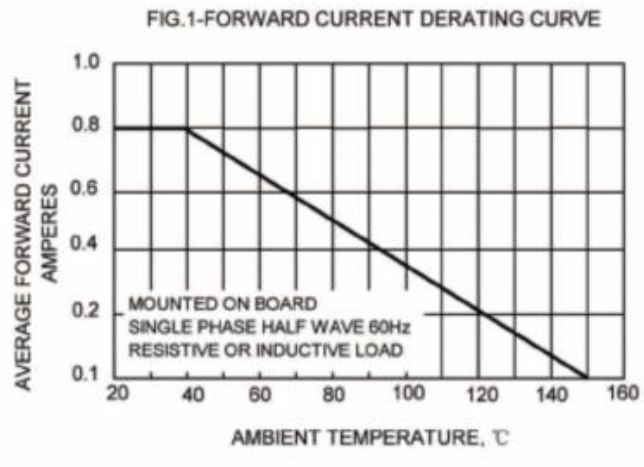
* Pulse width < 300 μs, duty cycle < 2%

Thermal-Mechanical Specifications:@T_A=25˚C unless otherwise specified

Type Number	Symbol	SM05S	SM1S	SM2S	SM4S	SM6S	SM8S	SM10S	Units
Typical Thermal Resistance junction to Ambient Typical Thermal Resistance junction to Lead	$R_{\theta JA}$ $R_{\theta JAL}$	60 16							˚C/W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55+150							˚C

Note: 1. Measured at 1.0 MHZ and applied reverse voltage of 4.0 VDC

Ratings and Characteristics Curves



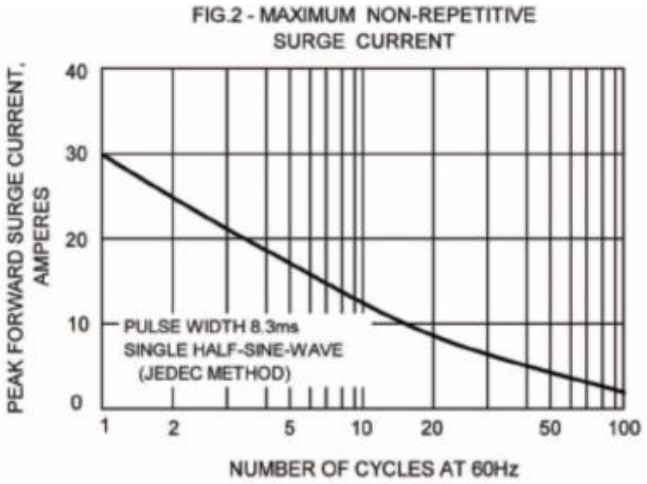


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FIG.3-TYPICAL REVERSE CHARACTERISTICS

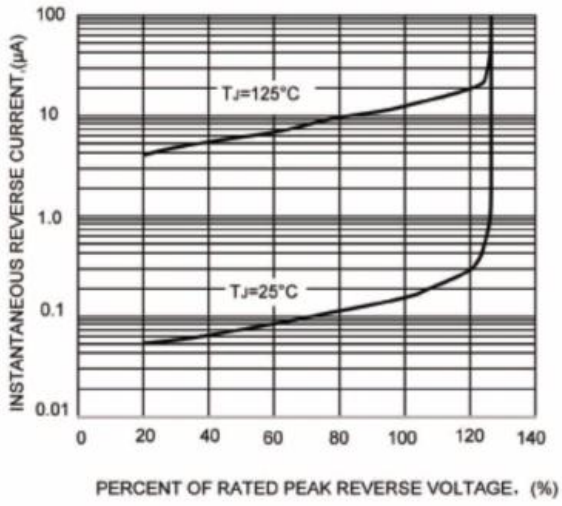


FIG.4-TYPICAL FORWARD CHARACTERISTICS

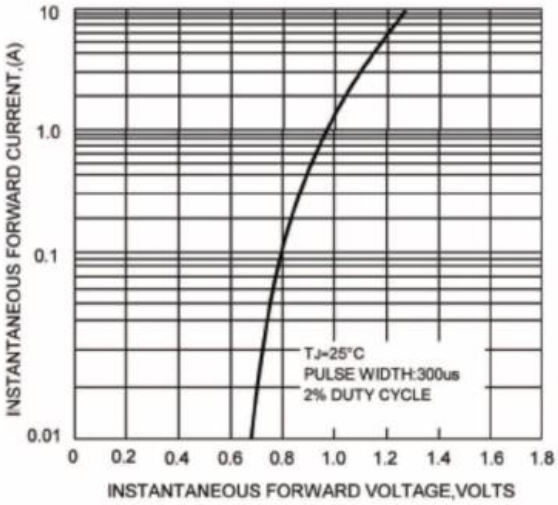
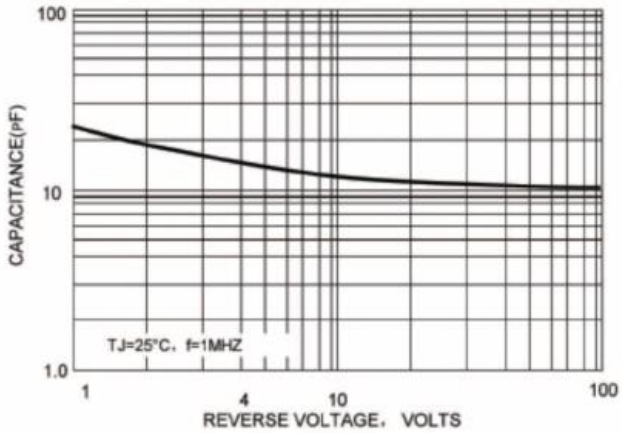


FIG.5-TYPICAL JUNCTION CAPACITANCE



Ordering Information

Device	Package	Plating	Shipping
SM05S THRU SM10S	BTS (Pb-Free)	Pure Sn	5000pcs / reel
SM05STR THRU SM10S TR	BTS (Pb-Free)	Pure Sn	5000pcs / reel
SM1STR2	BTS (Pb-Free)	Pure Sn	5000pcs /Plastic reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our tape and reel packaging specification.

Marking Diagram

Where XXXXX is YYWWL

SM05S = Type Number
YY = Year
WW = Week
L = Lot Number

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

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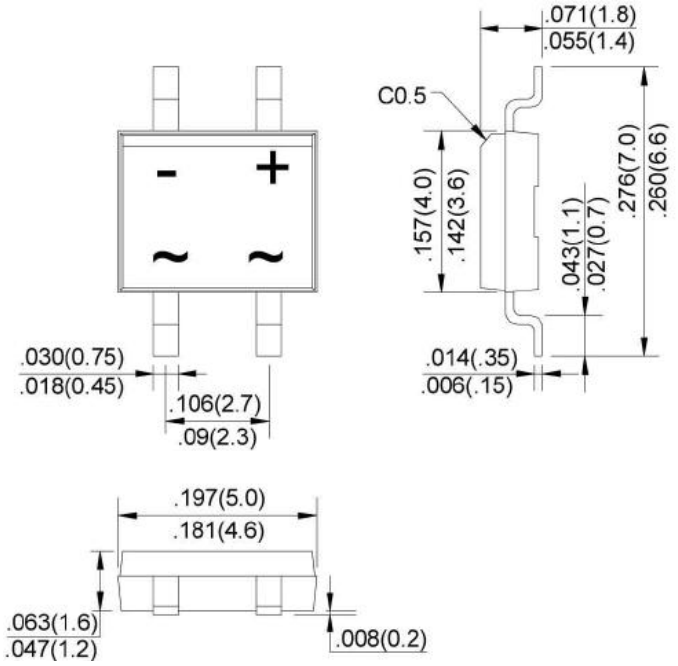
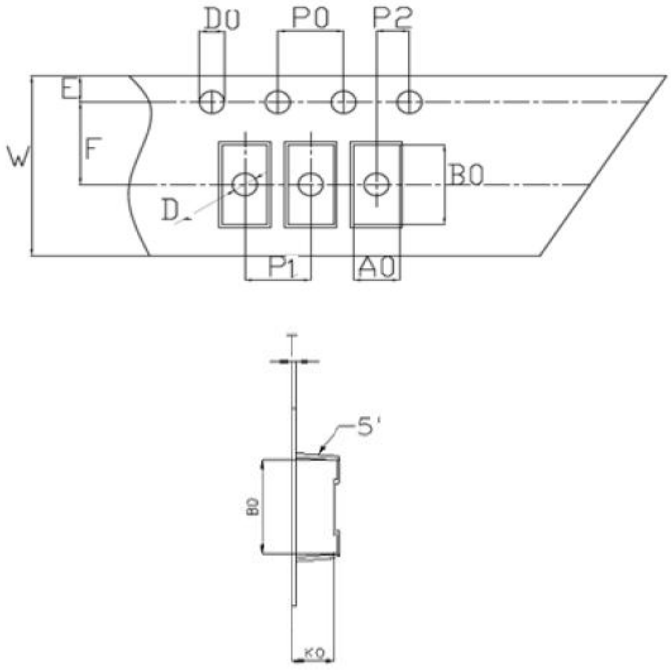
Mechanical Dimensions BTS(Inches/Millimeters)



Carrier Tape Specification BTS



SYMBOL	Millimeters	
	Min.	Max.
A0	4.92	5.12
B0	7.12	7.32
D0	1.50	1.60
D1	1.40	1.60
P0	3.90	4.10
P1	7.90	8.10
P2	1.95	2.05
E	1.65	1.85
K0	2.78	2.98
F	5.45	5.55
W	11.90	12.10
T	0.24	0.30
10P0	39.80	40.20
抗拉拉力	≥3KG	

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