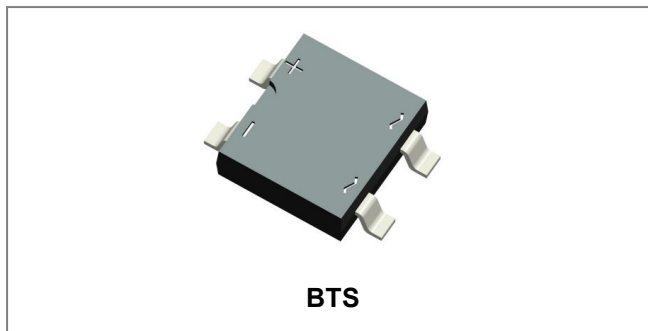


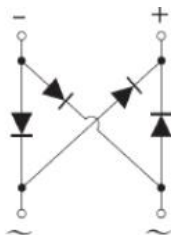
SM05S THRU SM10S SURFACE MOUNT GLASS PASSIVATED BRIDGE RECTIFIERS



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

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 |

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) | C _j | 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 per leg (Note 2) | R _{θJC} | 75 | | | | | | | °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
2. Thermal resistance junction to case

Ratings and Characteristics Curves

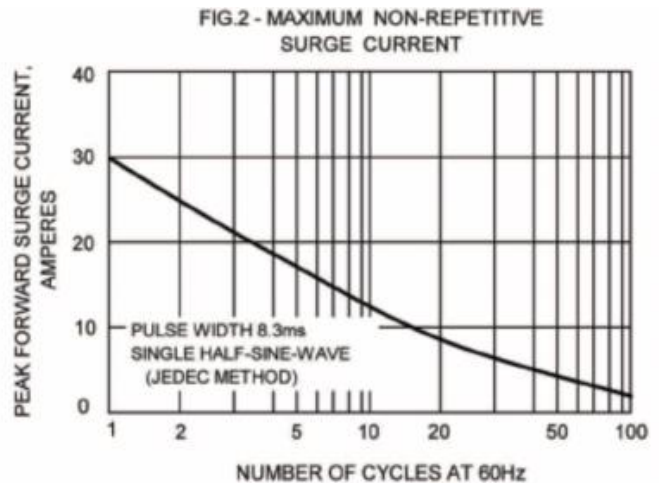
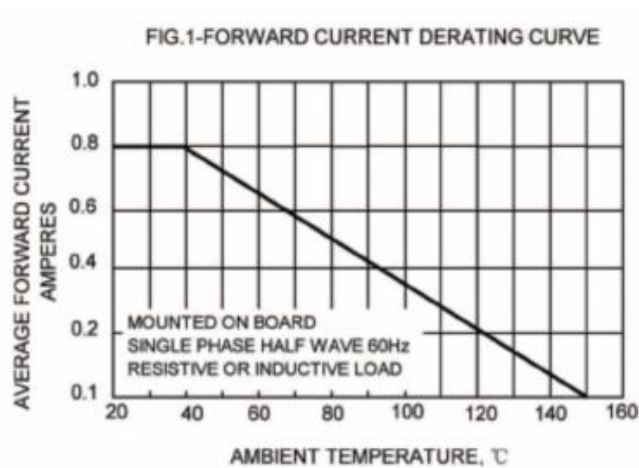


FIG.3-TYPICAL REVERSE CHARACTERISTICS

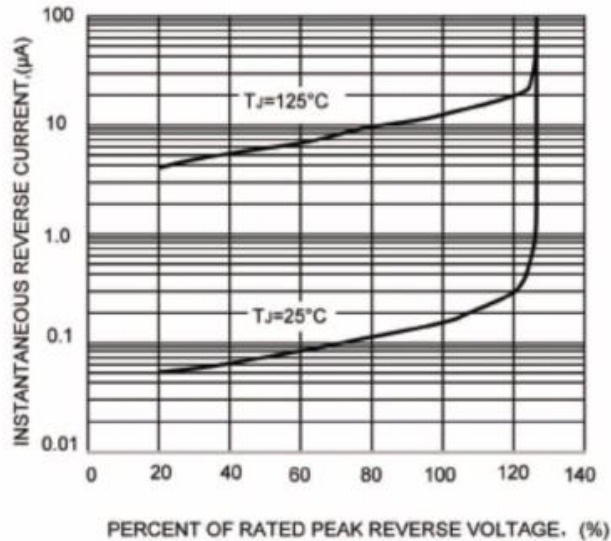


FIG.4-TYPICAL FORWARD CHARACTERISTICS

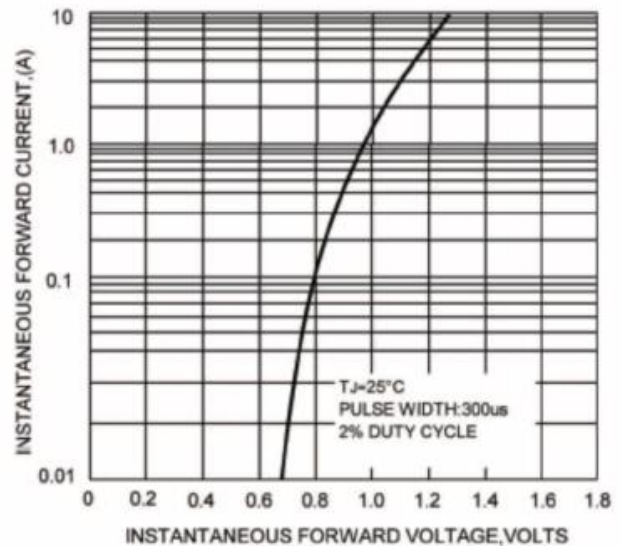
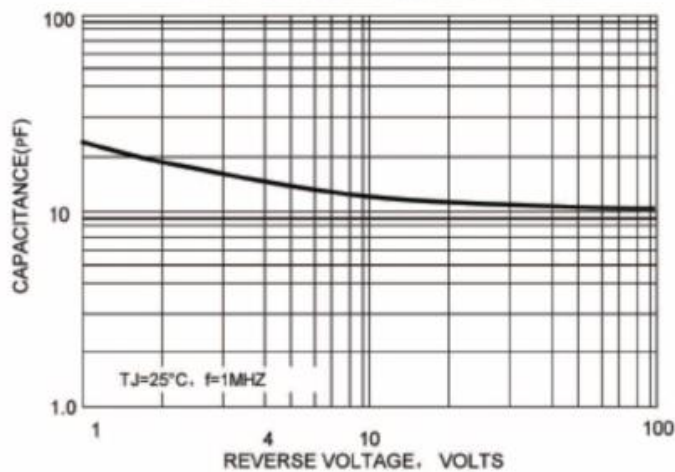


FIG.5-TYPICAL JUNCTION CAPACITANCE

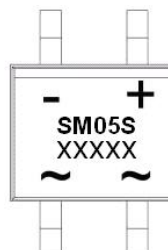


Ordering Information

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

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

Marking Diagram



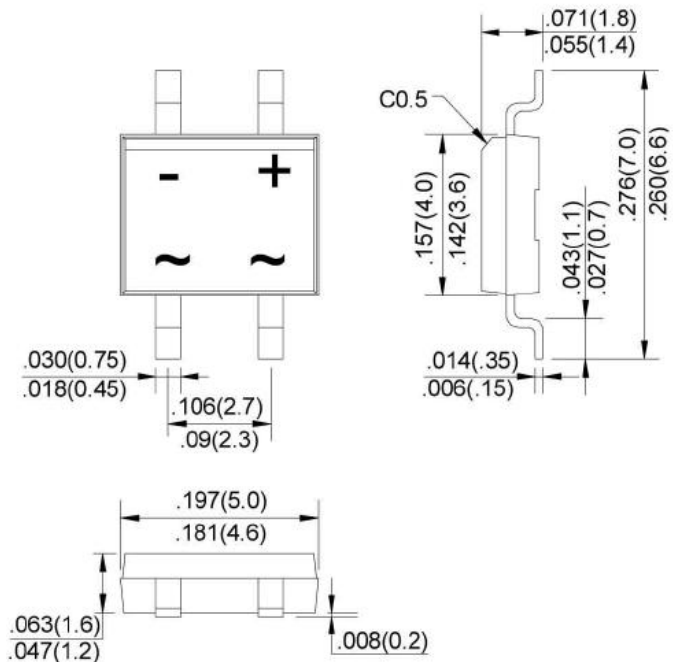
Where XXXXX is YYWWL

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

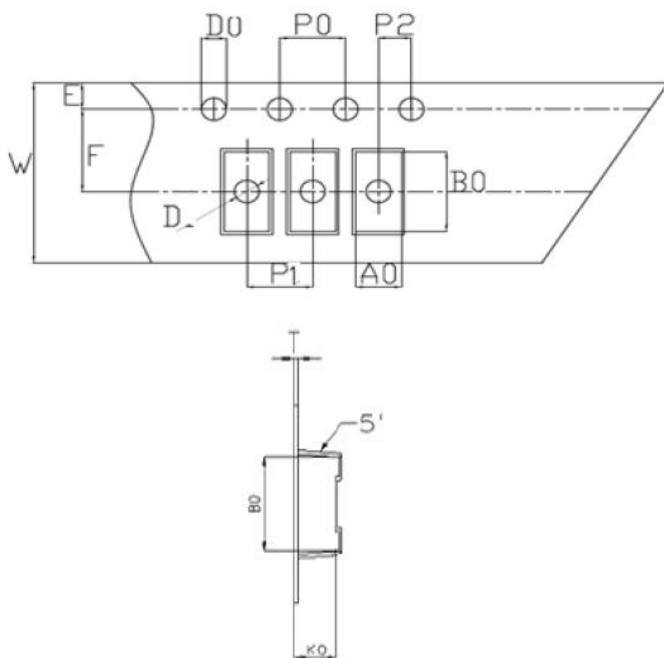
Cautions: Molding resin
Epoxy resin UL:94V-0

- China - Germany - Korea - Singapore - United States •
- <http://www.smc-diodes.com> - sales@smc-diodes.com •

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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