

Surface Mount Schottky Barrier Rectifiers

* “G” Lead(Pb)-Free

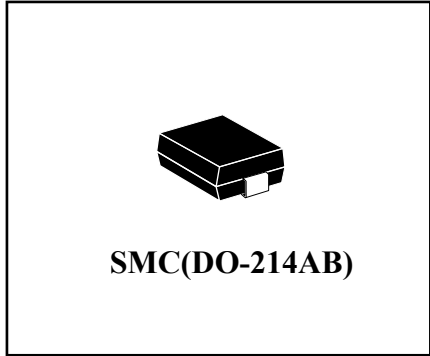
Features:

- *For Surface Mount Application
- *Metal-Semiconductor Junction With Guardring
- *Epitaxial Construction
- *Very Low Forward Voltage Drop
- *High Current Capability
- *Plastic Meterial Has UL Flammability Classification 94V-0
- *For Use In Low , And Polarity Protection Applications

Mechanical Data

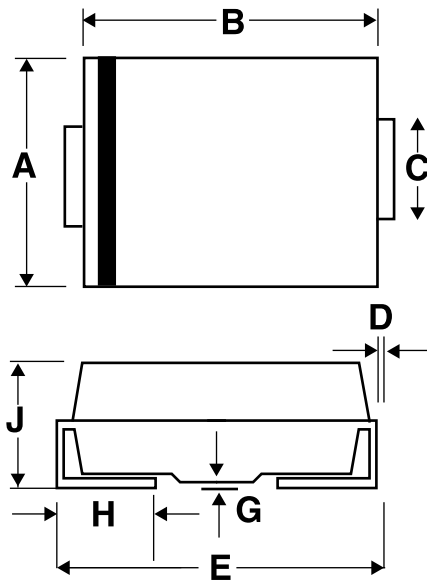
- *Case : Molded Plastic
- *Polarity :Indicated by cathode band
- *Weight : 0.007 Ounce ,0.21 grams

**REVERSE VOLTAGE
70 TO 100 VOLTS
FORWARD CURRENT
3.0 AMPERE**



SMC Outline Dimension

Unit:mm



| SMC | | |
|----------|------|------|
| Dim | Min | Max |
| A | 5.59 | 6.22 |
| B | 6.60 | 7.11 |
| C | 2.75 | 3.18 |
| D | 0.15 | 0.31 |
| E | 7.75 | 8.13 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 2.00 | 2.62 |

Maximum Ratings and Electrical Characteristics

Rating 25 °C Ambient Temperature Unless Otherwise Specified.
 Single Phase Half Wave, 60Hz , Resistive or Inductive Load.
 For Capacitive Load, Derate Current by 20%.

| Characteristic | Symbol | B370 | B380 | B390 | B3100 | Unit |
|----------------------------------------------------------------------------------------------------|--------|------------|------|------|-------|----------------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 70 | 80 | 90 | 100 | V |
| Maximum RMS Voltage | VRMS | 49 | 56 | 63 | 70 | V |
| Maximum DC Blocking Voltage | VDC | 70 | 80 | 90 | 100 | V |
| Maximum Average Forward Rectified Current @TC=90°C | IF(AV) | 3.0 | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 100 | | | | A |
| Maximum Instantaneous At 3.0A DC | VF | 0.85 | | | | V |
| Maximum DC Reverse Current @Tj=25 °C At Rated DC Blocking Voltage @Tj=100°C | IR | 0.5 20 | | | | mA |
| Typical Junction Capacitance (Note 1) | CJ | 100 | | | | P _F |
| Typical Thermal Resistance (Note 2) | RθJL | 10 | | | | °C/W |
| Operating Temperature Range | TJ | -55 to+125 | | | | °C |
| Storage Temperature Range | TSTG | -55 to+150 | | | | °C |

NOTES:1.Measured at 1.0MHz applied reverse voltage of 4.0V DC.
 2.Thermal Resistance Junction to case.

FIG.1 - FORWARD CURRENT DERATING CURVE

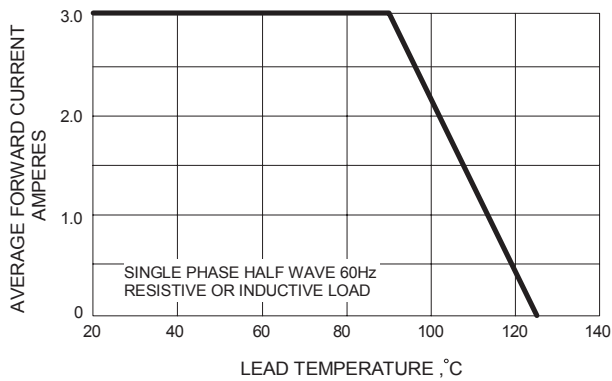


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

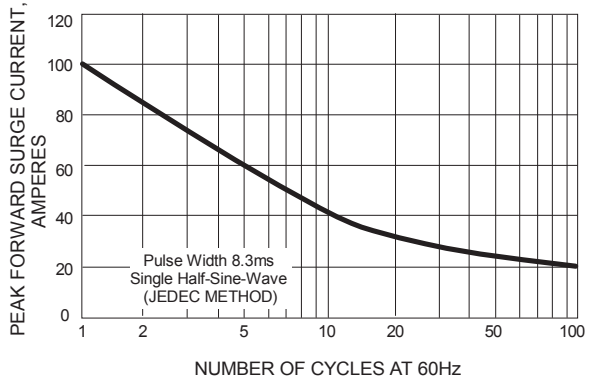


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

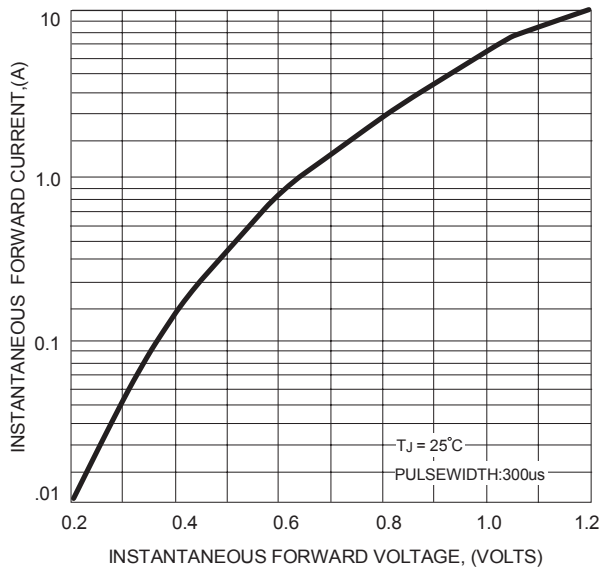


FIG.4 - TYPICAL JUNCTION CAPACITANCE

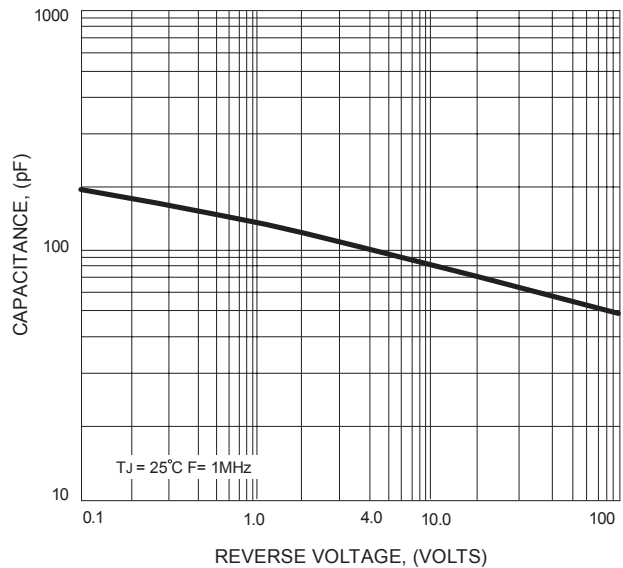


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

