

Surface Mount Schottky Barrier Rectifiers

(P/b) Lead(Pb)-Free

Features:

- *For Surface Mount Application
- *Metal-Semiconductor Junction With Guardring
- *Epitaxial Construction
- *Very Low Forward Voltage Drop
- *High Current Capability
- *Plastic Material 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 : 0.002 Ounce ,0.064 grams

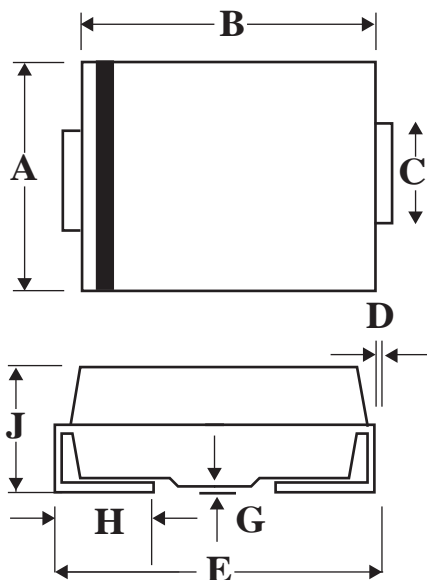
**REVERSE VOLTAGE
20 TO 60 VOLTS
FORWARD CURRENT
1.0 AMPERE**



SMA(DO-214AC)

SMA Outline Dimension

Unit:mm



| SMA | | |
|-----|------|------|
| Dim | Min | Max |
| A | 2.20 | 2.92 |
| B | 4.00 | 4.60 |
| C | 1.27 | 1.63 |
| D | 0.15 | 0.31 |
| E | 4.48 | 5.59 |
| G | 0.10 | 0.20 |
| H | 0.76 | 1.52 |
| J | 1.70 | 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%.

| Characteristics | Symbol | B120 | B130 | B140 | B150 | B160 | Unit |
|--|--------|------------|------|------|------|------|------|
| Maximum Recurrent Peak Reverse Voltage | VRRM | 20 | 30 | 40 | 50 | 60 | V |
| Maximum RMS Voltage | VRMS | 14 | 21 | 28 | 35 | 42 | V |
| Maximum DC Blocking Voltage | VDC | 20 | 30 | 40 | 50 | 60 | V |
| Maximum Average Forward Rectified Current @TC=100 °C | IF(AV) | 1.0 | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 30 | | | | | A |
| Maximum Instantaneous At 1.0A DC | VF | 0.5 | | | 0.7 | | V |
| Maximum DC Reverse Current @Tj=25 °C At Rated DC Blocking Voltage @Tj=100 °C | IR | 0.5 10 | | | | | mA |
| Typical Junction Capacitance (Note 1) | CJ | 110 | | | | | PF |
| Typical Thermal Resistance (Note 2) | R θJL | 20 | | | | | °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

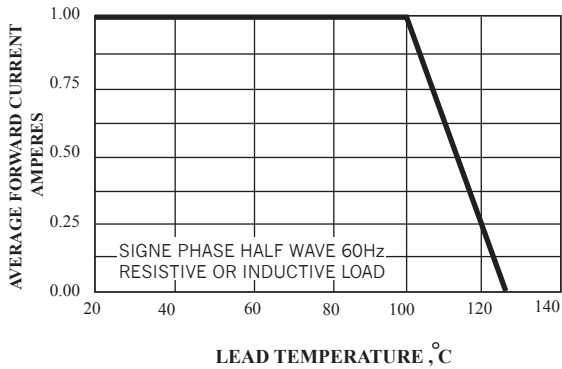


FIG.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

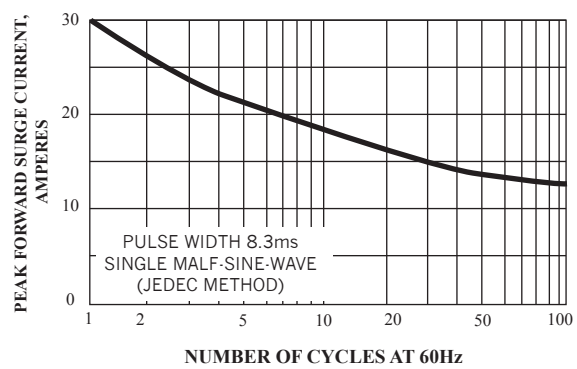


FIG.3 TYPICAL FORWARD CHARACTERISTICS

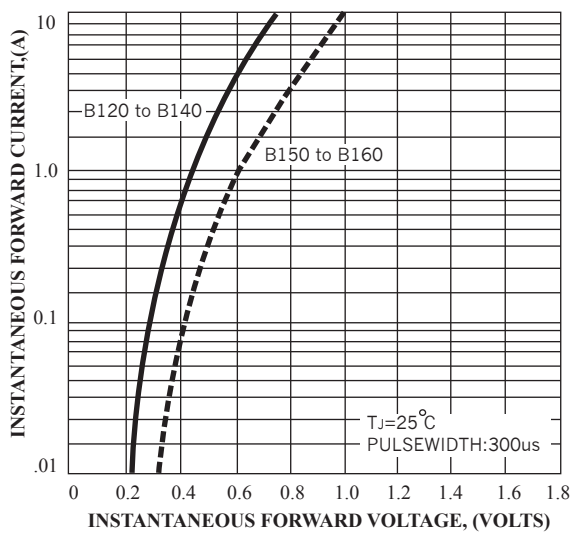


FIG.4 TYPICAL JUNCTION CAPACITANCE

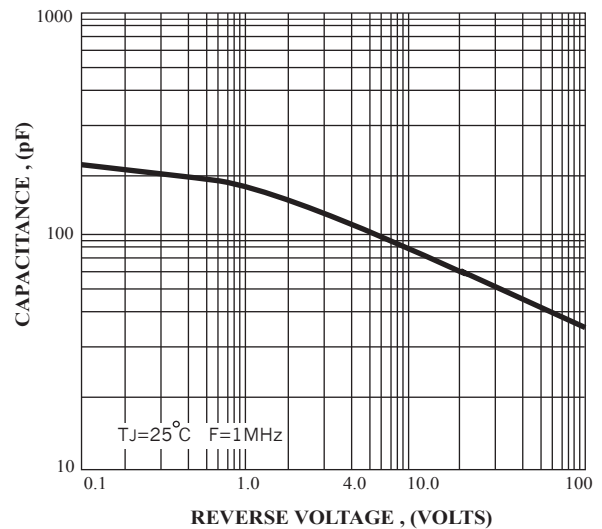


FIG.5 TYPICAL REVERSE CHARACTERISTICS

