

Surface Mount Schottky Barrier Rectifiers

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 : 0.007 Ounce ,0.21 grams

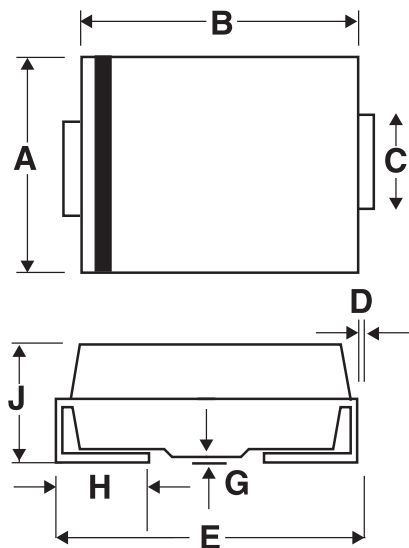
REVERSE VOLTAGE
20 TO 60 VOLTS
FORWARD CURRENT
5.0 AMPERE



SMC(DO-214AB)

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%.

| Characteristics | Symbol | B520 | B530 | B540 | B550 | B560 | 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=80°C | I _{F(AV)} | 5.0 | | | | | A |
| Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method) | IFSM | 175 | | | | | A |
| Maximum Instantaneous At 5.0A DC | VF | 0.55 | | | 0.7 | | V |
| Maximum DC Reverse Current @T _j =25°C At Rated DC Blocking Voltage @T _j =100°C | IR | 0.5 20 | | | | | mA |
| Typical Junction Capacitance (Note 1) | C _J | 300 | | | | | PF |
| Typical Thermal Resistance (Note 2) | R _{θJL} | 10 | | | | | °C/W |
| Operating Temperature Range | T _J | -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.

