**TAIGITON**

Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Forward Voltage Drop
- Surge Overload Rating to 100A Peak
- Low Power Loss
- Built-in Strain Relief
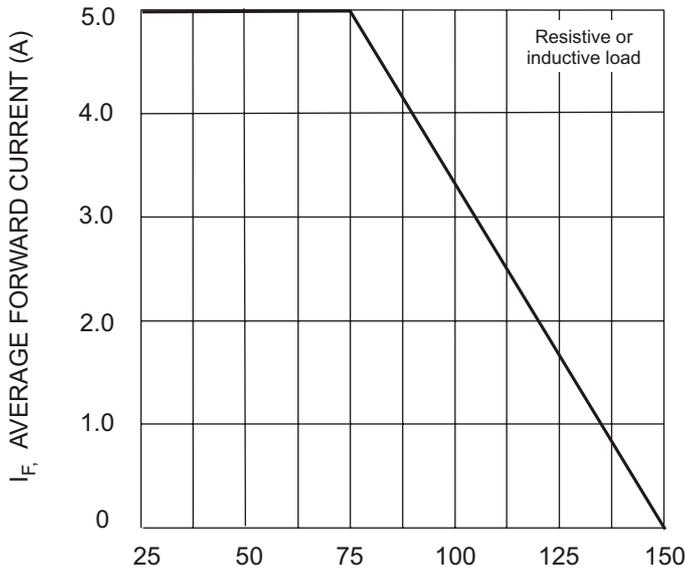- Plastic Case Material has UL Flammability Classification Rating 94V-O

Mechanical Data

- Case: SMB/DO-214AA, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.21 grams (approx.)
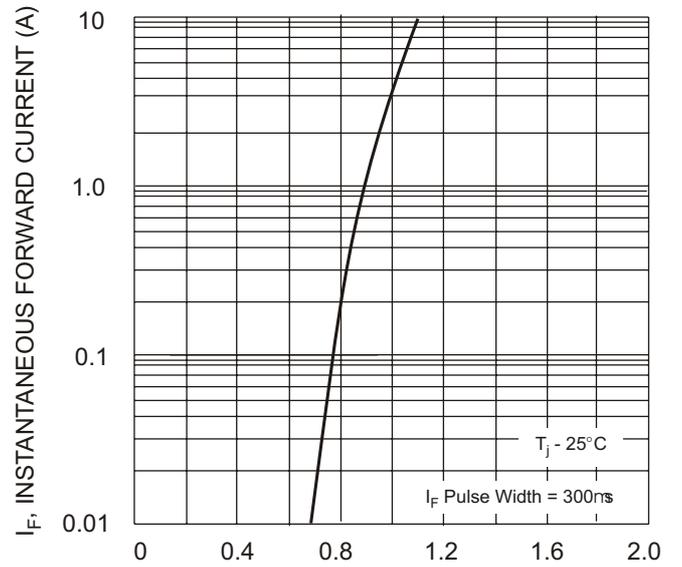- **Lead Free: For RoHS / Lead Free Version,**

SMB(DO−214AA)

Dimensions in inches and (millimeters)
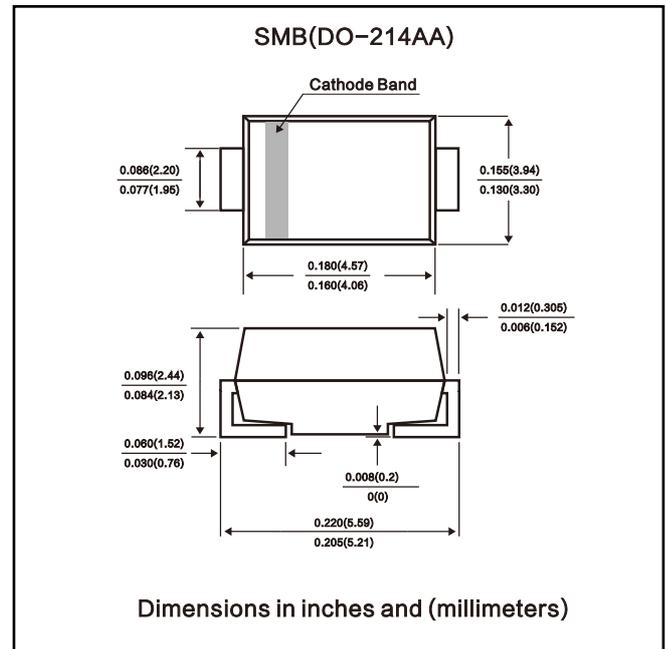
Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

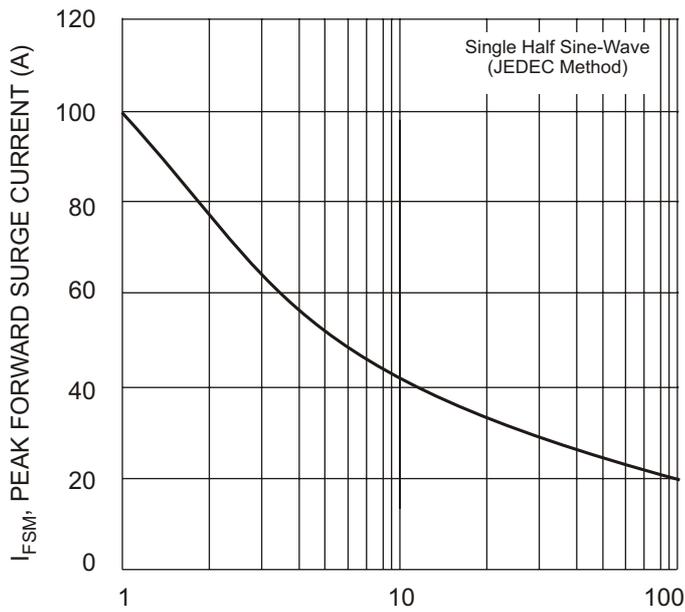| Characteristic	Symbol	S5A	S5B	S5D	S5G	S5J	S5K	S5M	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectified Output Current @T_L = 75°C	I_O	5.0							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	100							A
Forward Voltage @I_F = 5.0A	V_{FM}	1.15							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 125°C	I_{RM}	10 250							μA
Typical Junction Capacitance (Note 1)	C_j	40							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$	10							°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-65 to +150							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.
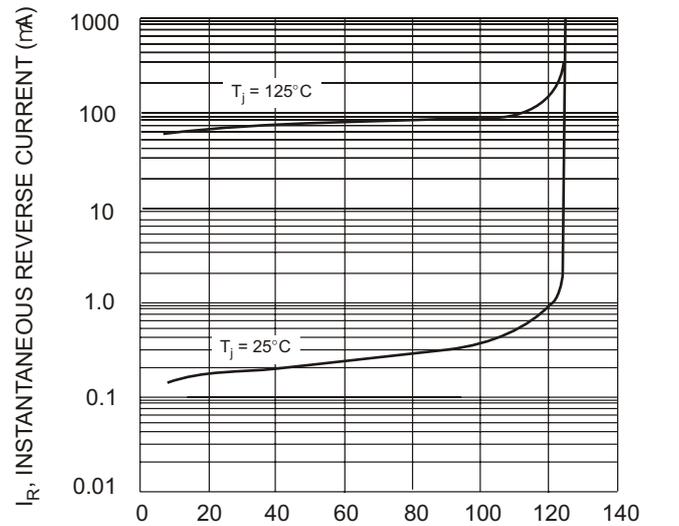   2. Mounted on P.C. Board with 8.0mm^2 land area.

Fig. 1 Forward Current Derating Curve

X-axis: T_T, TERMINAL TEMPERATURE (°C)
Y-axis: I_F, AVERAGE FORWARD CURRENT (A)
Label: Resistive or inductive load

Fig. 2 Typical Forward Characteristics

X-axis: V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Y-axis: I_F, INSTANTANEOUS FORWARD CURRENT (A)
Labels: T_j - 25°C, I_F Pulse Width = 300ns

Fig. 3 Forward Surge Current Derating Curve

X-axis: NUMBER OF CYCLES AT 60 Hz
Y-axis: I_{FSM}, PEAK FORWARD SURGE CURRENT (A)
Label: Single Half Sine-Wave (JEDEC Method)

Fig. 4 Typical Reverse Characteristics

X-axis: PERCENT OF RATED PEAK REVERSE VOLTAGE (%)
Y-axis: I_R, INSTANTANEOUS REVERSE CURRENT (mA)
Labels: T_j = 125°C, T_j = 25°C