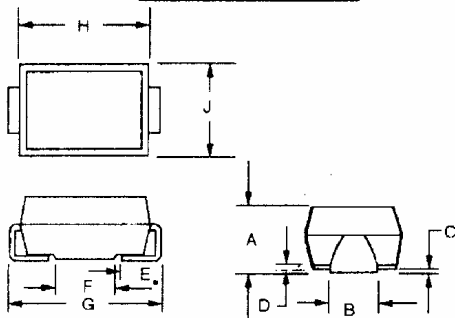
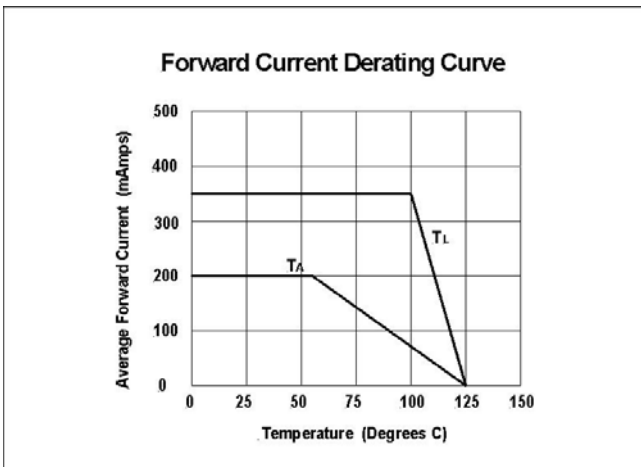


# SMA/DO-214AC



| DIMENSIONS |          |          |         |         |
|------------|----------|----------|---------|---------|
|            | inches   |          | mm      |         |
|            | Min      | Max      | Min     | Max     |
| A          | 0.078(L) | 0.116(L) | 1.98(L) | 2.96(L) |
| A          | 0.110(H) | 0.117(H) | 2.80(H) | 2.98(H) |
| B          | 0.067    | 0.088    | 1.7     | 2.24    |
| C          |          | 0.008    |         | 0.20    |
| D          |          | 0.02     |         | 0.51    |
| E          | 0.030    | 0.060    | 0.76    | 1.52    |
| F          | 0.065    | 0.094    | 1.65    | 2.39    |
| G          | 0.204    | 0.220    | 5.21    | 5.59    |
| H          | 0.160    | 0.180    | 4.06    | 4.57    |
| I          | 0.101    | 0.112    | 2.56    | 2.85    |



\*\*\*NOTE\*\*\*THIS IS A PRELIMINARY DATA SHEET AND IS SUBJECT TO CHANGE\*\*\*\*

# Surface Mount High Voltage Diode

| SM3F   |                 |  |
|--|-----------------|--|
| Repetitive Peak Reverse Voltage  | $V_{RRM}$       | 3,000 Volts                                  |
| Average Forward Current Max @ $T_A=55^\circ\text{C}$   | $I_{FAVM}$      | 200 mAmps                                    |
| Average Forward Current Max @ $T_L=100^\circ\text{C}$  | $I_{FAVM}$      | 350 mAmps                                    |
| Maximum Forward Voltage Drop, @ $I_F=100$ mAmps  | $V_F$           | 3.0 Volts                                    |
| Maximum Reverse Current @ $V_{RRM}$ @ $25^\circ\text{C}$                                     | $I_R$           | 5.0 $\mu\text{Amps}$                         |
| Typical Reverse Recovery Time @ $I_F=20\text{mA}$ , $I_R=40\text{mA}$ , $I_{tr}=10\text{mA}$ | $T_{RR}$        | 75 nsec                                      |
| Typical Reverse Recovery Time @ $I_F=5\text{mA}$ , $I_R=10\text{mA}$ , $I_{tr}=2.5\text{mA}$ | $T_{RR}$        | 100 nsec                                     |
| Maximum Surge Current (8.3ms Sine Wave)  | $I_{FSM}$       | 15 Amps                                      |
| Typical Junction Capacitance (NOTE 1)  | $C_J$           | 15 pF  |
| Typical Thermal Resistance (NOTE 2)  | $R_{\theta JA}$ | 30 $^\circ\text{C/W}$                        |
| Typical Thermal Resistance (NOTE 2)  | $R_{\theta JL}$ | 7 $^\circ\text{C/W}$                         |
| Operating Temperature  | $T_A$           | -35 $^\circ\text{C}$ to 125 $^\circ\text{C}$ |
| Storage Temperature  | $T_{STG}$       | -55 $^\circ\text{C}$ to 150 $^\circ\text{C}$ |

## NOTES:

- (1) Measured at 1kHz
- (2) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2" x 0.2" (5.0 x 5.0mm) copper pad areas