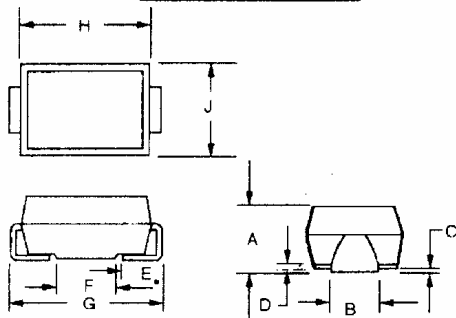


# SM3F

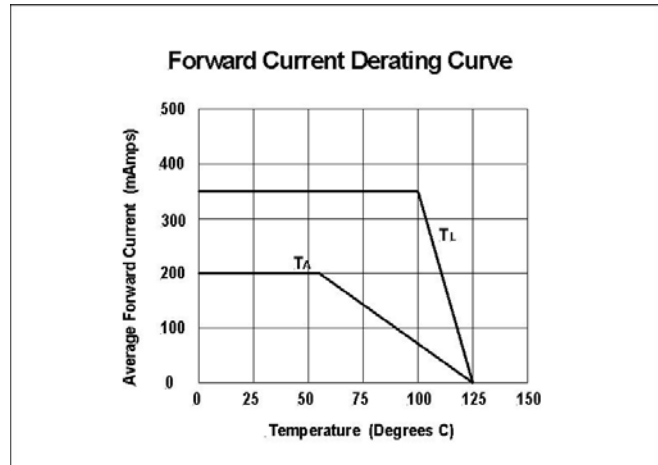


## 3,000V Fast Recovery Surface Mount

### SMA/DO-214AC



DIMENSIONS					
	inches		mm		
	Min	Max	Min	Max	
A	0.078(L)	0.116(L)	1.98(L)	2.95(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	0.190	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 @ $I_F=20\text{mA}$ , $I_R=40\text{mA}$ , $I_{rr}=10\text{mA}$	$T_{RR}$	75 nsec
Typical Reverse Recovery Time @ $I_F=5\text{mA}$ , $I_R=10\text{mA}$ , $I_{rr}=2.5\text{mA}$	$T_{RR}$	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

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