

Features

- $I_{F(AV)}$ 1A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- MX
- X : From 1 To 7



SMA top view



Schematic diagram



Halogen-Free

Maximum Ratings($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Test Conditions	M1	M2	M3	M4	M5	M6	M7	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		50	100	200	400	600	800	1000	V
V_{RMS}	Maximum RMS voltage		35	70	140	280	420	560	700	V
$I_{F(AV)}$	Maximum Average Forward Current	60Hz Half-sine wave, Resistance load, $T_L=75^\circ\text{C}$	1							A
I_{FSM}	Surge(Non-repetitive) Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^\circ\text{C}$	30							A
T_j, T_{stg}	Operating and Storage Temperature Range		-55~+150							$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	M1	M2	M3	M4	M5	M6	M7	Unit
V _F	Peak Forward Voltage	I _F =1.0A	1							V
I _{RRM1}	Peak Reverse Current	V _{RM} =V _{RRM} ,T _a =25°C	5							μA
I _{RRM2}	Peak Reverse Current	V _{RM} =V _{RRM} ,T _a =125°C	50							
R _{QJ-L}	Thermal Resistance(Typical)	Between junction and ambient	55							°C/W
R _{QJ-A}		Between junction and termina	25							°C/W

Typical Operating Characteristics

Fig.1 Forward Current Derating Curve

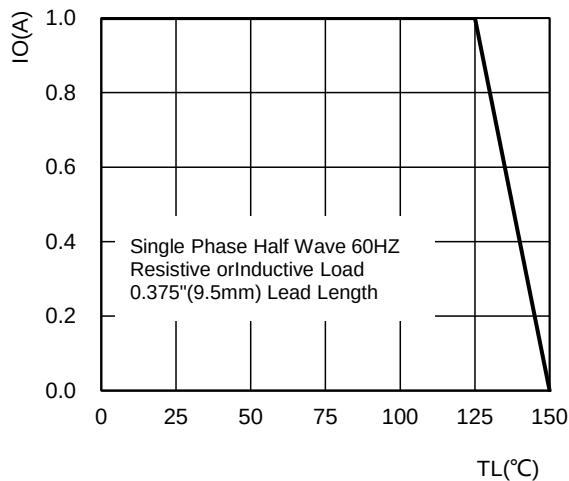


Fig.2 Maximum Non-Repetitive Forward Surge Current

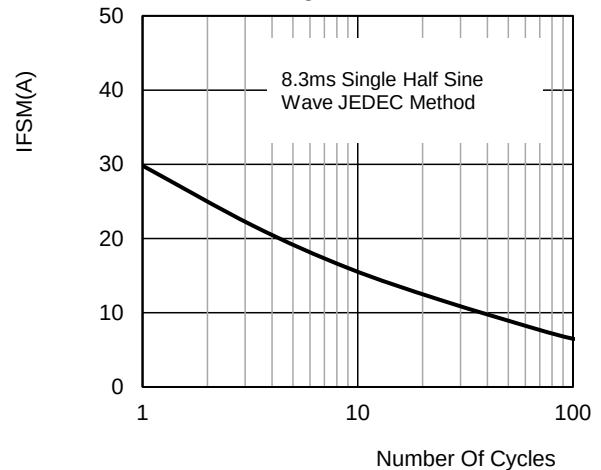


Fig.3 Typical Forward Characteristics

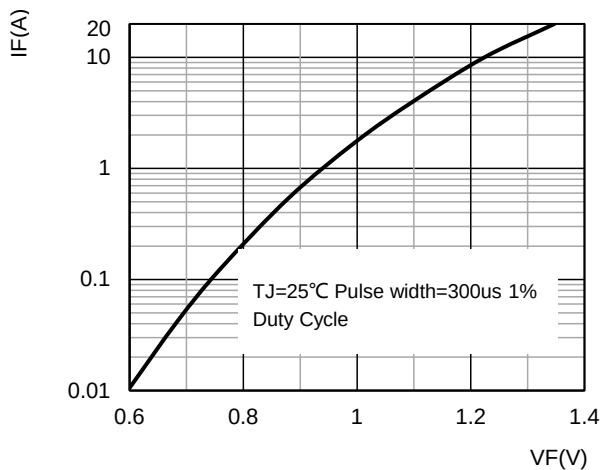
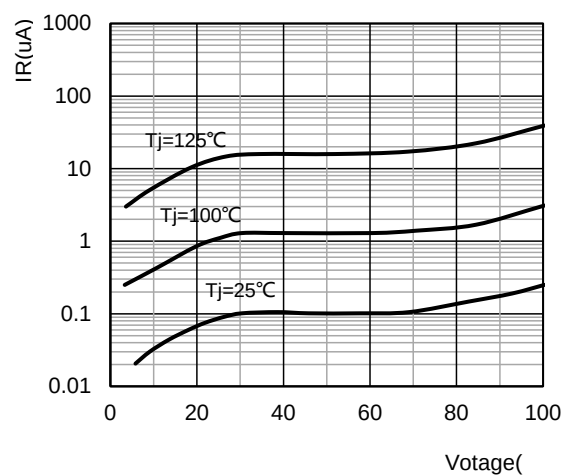


Fig.4 Typical Reverse Characteristics

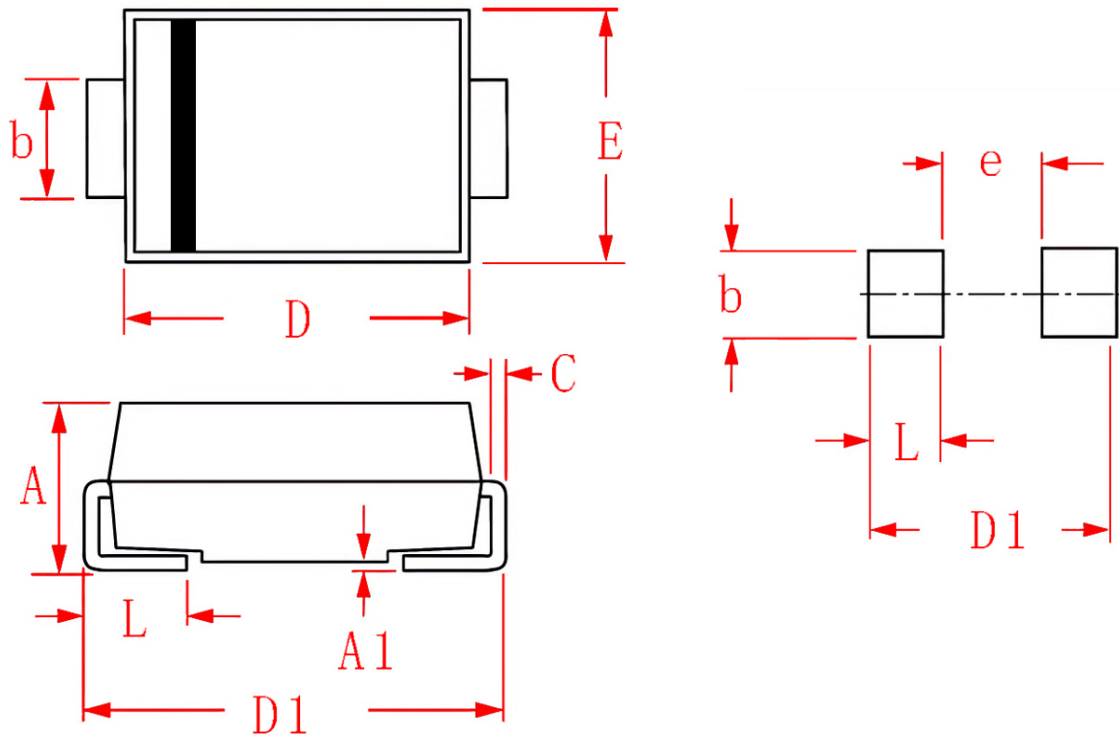


Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
M1	SMA	M1	2,000	10,000	100,000	7"reel
M2		M2				
M3		M3				
M4		M4				
M5		M5				
M6		M6				
M7		M7				

SMA Package information

SMA (DO-214AC)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.900	2.200	0.075	0.087
A1	0.050	0.200	0.002	0.008
b	1.300	1.600	0.051	0.063
C	0.150	0.310	0.006	0.012
D	4.000	4.500	0.157	0.177
D1	4.700	5.200	0.185	0.205
E	2.300	2.700	0.090	0.106
e	-	1.880	-	0.074
L	0.900	1.500	0.035	0.059