

Fast Recovery Rectifier 2000V DO-214AC SMA

FM20

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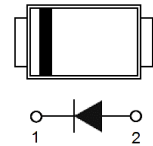
FEATURE

- Peak Surge Overload Rating: 30A
- Low Profile Package
- High Forward Surge Capability
- Glass Passivated Junction



MECHANICAL DATA

- Case: Molded Plastic, Do-214AC SMA
- Terminals: Solder Plated, Solderable Per Mil-Std-750, Method 2026
- Polarity: Color Band Denotes Cathode End



MAXIMUM RATINGS AND ELECTRICAL CHATACTERISTIC

Parameter		Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	2000	V
Maximum RMS Voltage		V_{RMS}	1400	V
Maximum DC Blocking Voltage		V_{DC}	2000	V
Maximum Average Forward Rectified Current		$I_{F(AV)}$	0.5	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rate load		I_{FSM}	30	A
Maximum Forward Voltage at 2A		V_F	3.0	V
Maximum Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	5.0	μA
	T _A =100°C		50	
Typical Thermal Resistance		R _{ΘJA}	61	°C/W
		R _{ΘJC}	30	°C/W
		R _{ΘJL}	6	°C/W
Maximum Reverse Recovery Time		T _{RR}	500	ns
Operating Junction and Storage Temperature Range		T _J , T _{STG}	-65 to +150	°C

Notes:

1. $T_A=25^{\circ}\text{C}$ unless otherwise specified
2. Device Mounted on PCB with 5mmx5mm copper pad area
3. Single Phase, half wave, 60Hz, resistive or inductive load. Capacitive load, derate current by 20%

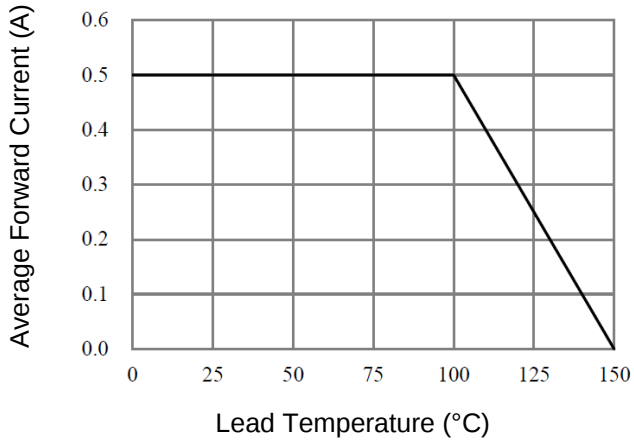
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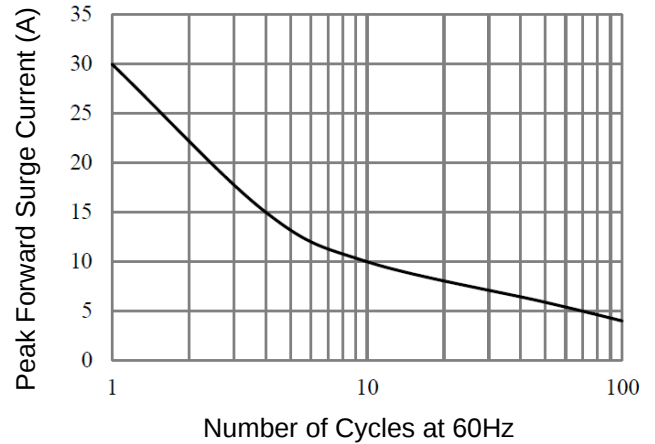
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CHARACTERISTIC CURVES

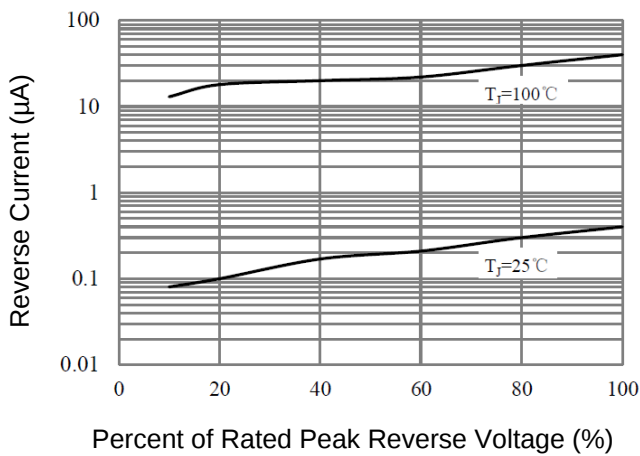
Forward Current Derating Curve



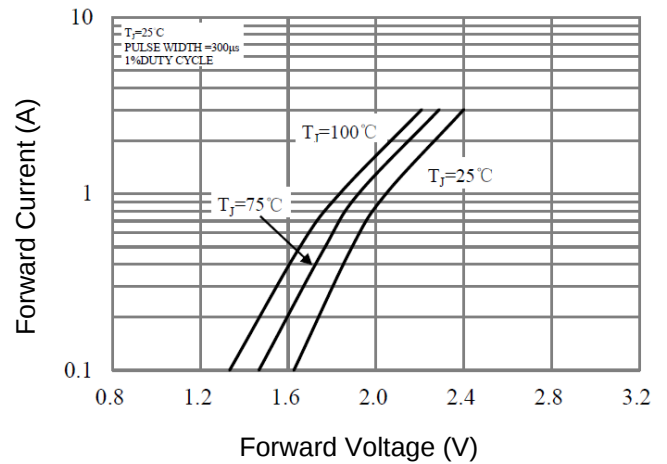
Non-Repetitive Peak Forward Surge Current



Typical Reverse Characteristics



Typical Forward Characteristics



DIMENSIONS

DO-214AC	Min (mm)	Max (mm)
A	1.230	1.700
B	3.900	4.600
C	2.180	2.900
D	0.152	0.305
E	4.700	5.310
G	0.000	0.203
H	0.760	1.520
J	1.700	2.500
X	2.500	
X1	6.500	
X2	1.500	
Y	1.700	

