

Glass Passivated Rectifier 3000V DO-214AC SMA

FM30

MERITEK

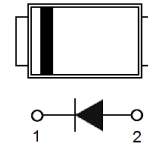
FEATURES

- Peak Surge Overload Rating: 45A
- Low Profile Package
- High Forward Surge Capability
- Glass Passivated Chip 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

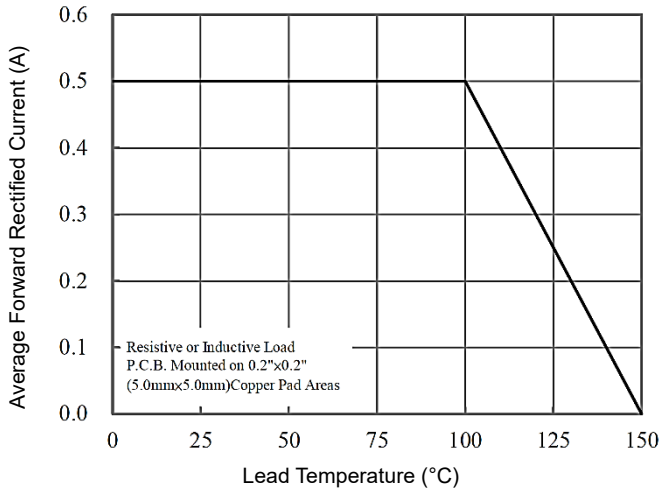
Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	3000	V
Maximum RMS Voltage	V_{RMS}	2100	V
Maximum DC Blocking Voltage	V_{DC}	3000	V
Maximum Average Forward Rectified Current at $T_L=100^{\circ}\text{C}$	$I_{F(AV)}$	0.5	A
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	45	A
Maximum Forward Voltage at 0.5A	V_F	2.3	V
Maximum Reverse Current at Rated DC Blocking Voltage	I_R	$T_J=25^{\circ}\text{C}$	5.0
		$T_J=100^{\circ}\text{C}$	200
Maximum Reverse Recovery Time	T_{rr}	500	ns
Typical Thermal Resistance- Junction to Lead	$R_{\theta JL}$	45	$^{\circ}\text{C}/\text{W}$
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-65 to +150	$^{\circ}\text{C}$

Note :

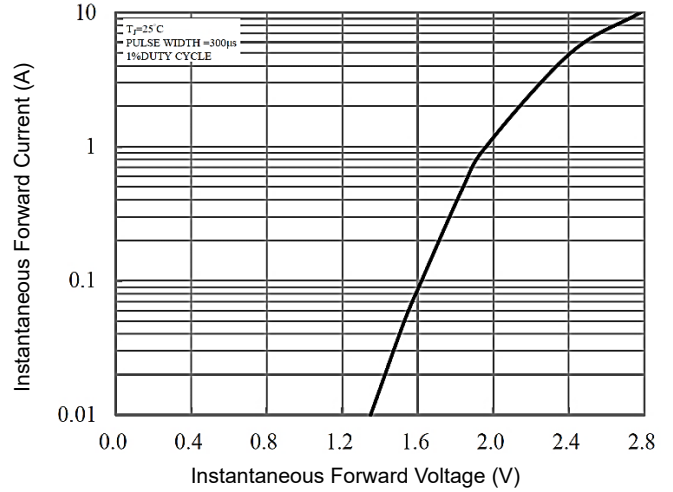
1. Ratings at 25°C ambient temperature unless otherwise specified.
2. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.
3. Device mounted on P.C.B. with 0.2" x 0.2" (5.0 x 5.0mm) copper pad areas.

CHARACTERISTIC CURVES

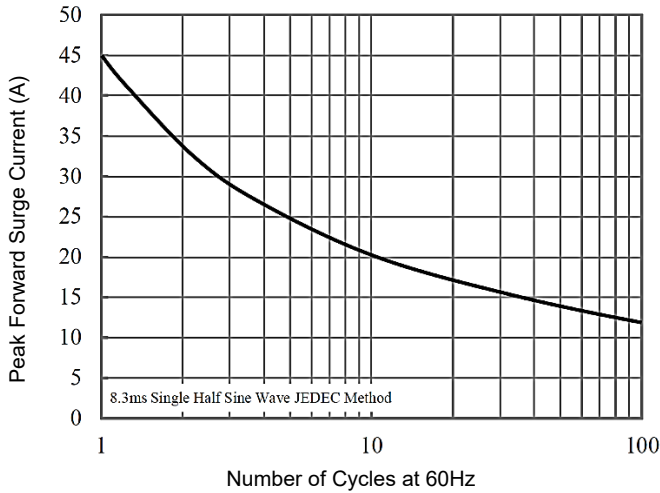
Typical Forward Current Derating Curve



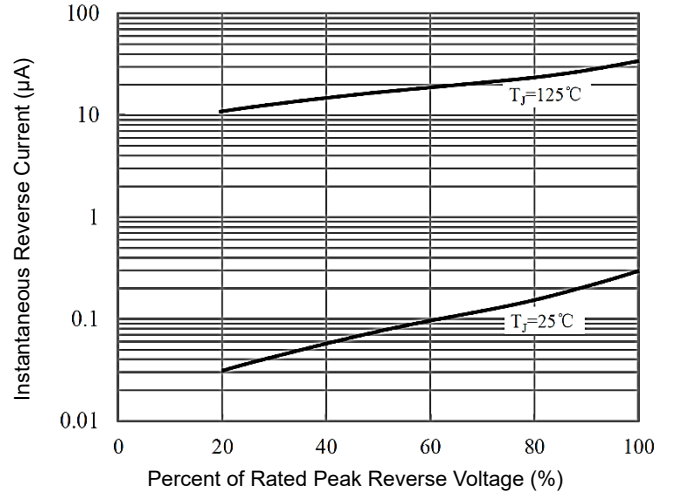
Typical Instantaneous Forward Characteristics



Maximum Non-Repetitive Forward Surge Current



Typical Reverse 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

