

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Lead free finish/RoHS compliant
- High current capability
- Moisture sensitivity level 1
- High temperature soldering guaranteed: 250°C/10 seconds



DO-214AC (SMA)

Mechanical Data

- Case: SMA molded plastic body
- Terminals: Tin plated, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end

Maximum Ratings & Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%)

Parameter	Symbols	Value	Unit
Maximum Repetitive 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 $T_A=50^\circ\text{C}$	$I_{(AV)}$	0.5	A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	30	A
Maximum Instantaneous Forward Voltage at 0.5A	V_F	2.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	3
		$T_A=100^\circ\text{C}$	50
Maximum Reverse Recovery Time ¹	t_{rr}	500	nS
Typical Junction Capacitance ²	C_J	30	pF
Operating Junction Temperature Range	T_J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

Note:

1. Reverse recovery condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{rr}=0.25\text{A}$.
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Typical Electrical and Thermal Characteristic Curves

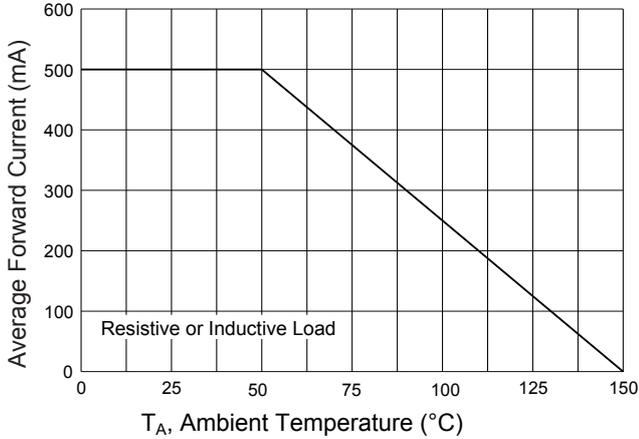


Figure 1. Forward Current Derating Curve

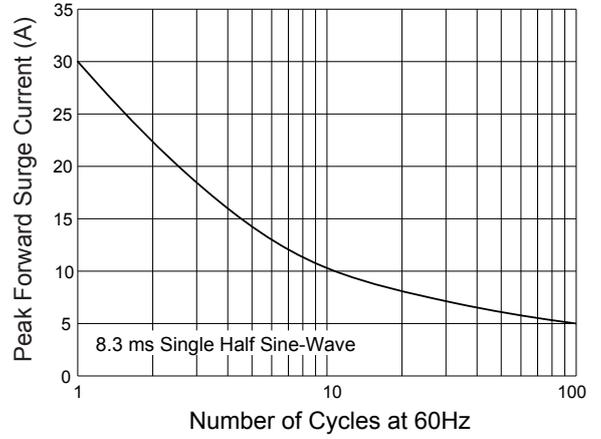


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

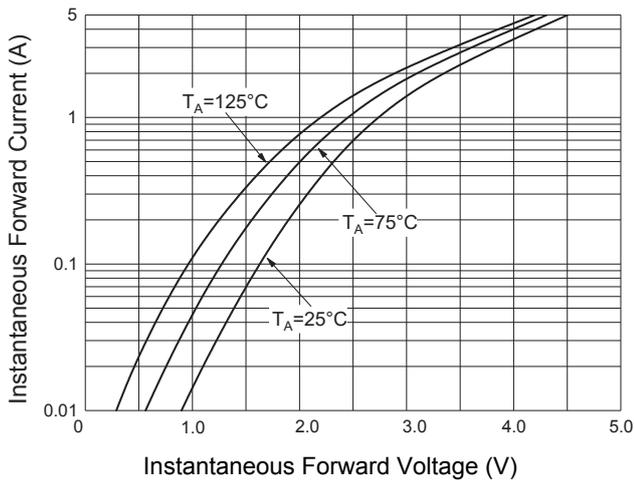


Figure 3. Typical Instantaneous Forward Characteristics

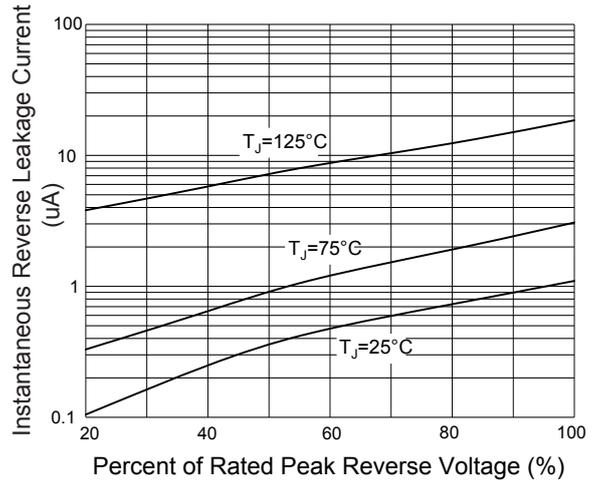
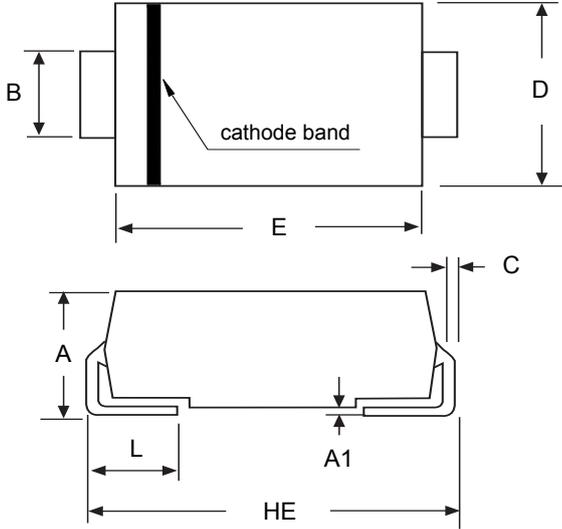


Figure 4. Typical Reverse Leakage Characteristics

Package Outline Dimensions DO-214AC (SMA)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.900	2.440	0.075	0.096
A1	-	0.203	-	0.008
B	1.270	1.700	0.050	0.067
C	0.152	0.305	0.006	0.012
D	2.250	2.920	0.090	0.115
E	3.990	4.750	0.157	0.187
L	0.760	1.520	0.030	0.060
HE	4.800	5.660	0.189	0.222

Order Information

Device	Package	Marking	Carrier	Quantity
GSFR3000J	DO-214AC (SMA)	FR300	Tape & Reel	7,500pcs / Reel