

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds at terminals



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	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	2500	V
Maximum RMS Voltage	V_{RMS}	1750	V
Maximum DC Blocking Voltage	V_{DC}	2500	V
Maximum Average Forward Rectified Current 0.375" (9.5mm) Lead Length 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, $T_A=25^\circ\text{C}$	I_R	5	uA
Maximum DC Reverse Current at Rated DC Blocking Voltage, $T_A=100^\circ\text{C}$		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	°C
Storage Temperature Range	T_{STG}	-65 to +150°C	°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

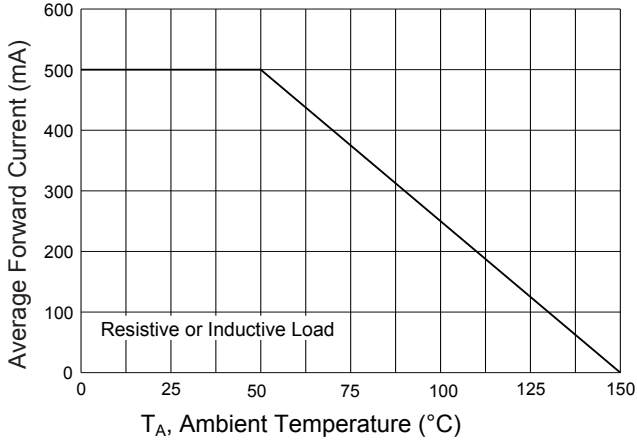


Figure 1. Forward Current Derating Curve

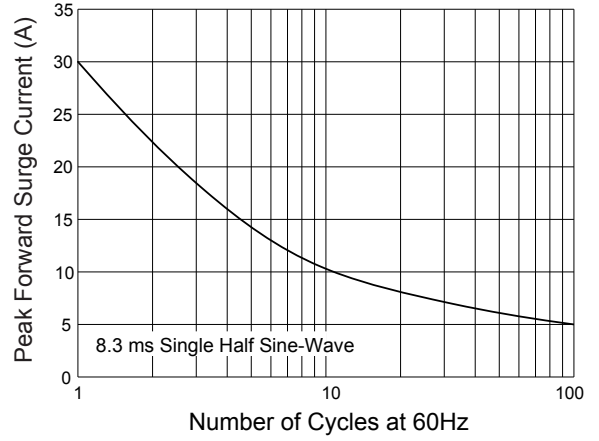


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

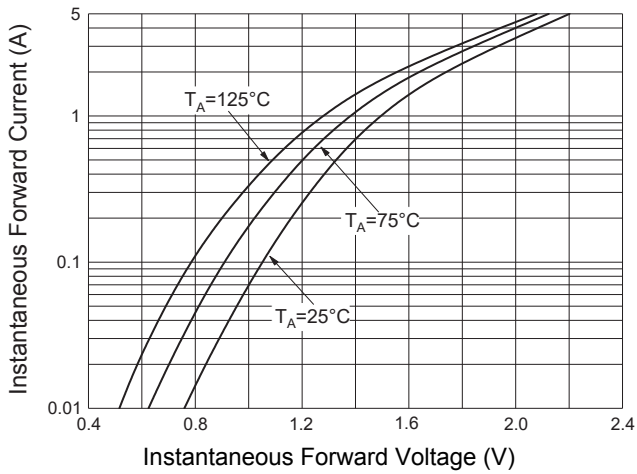


Figure 3. Typical Instantaneous Forward Characteristics

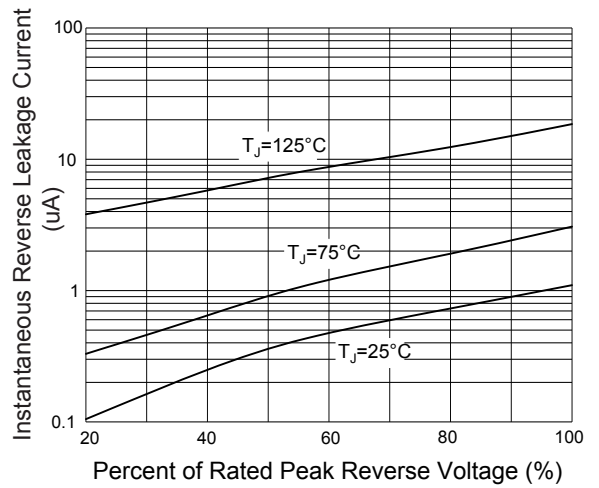
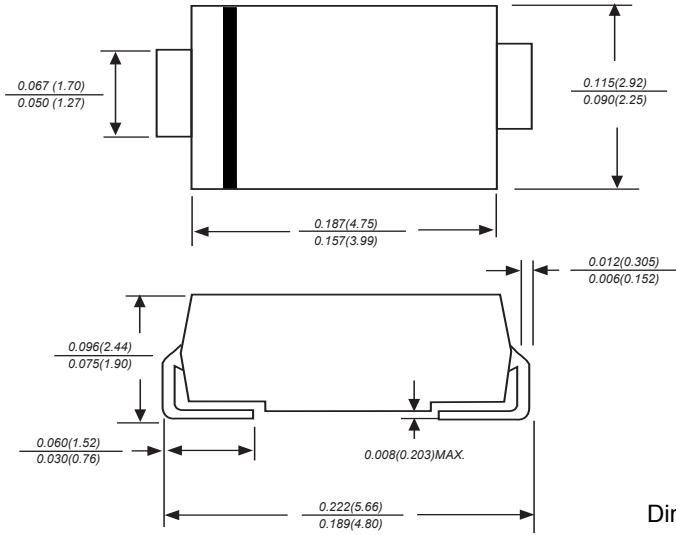


Figure 4. Typical Reverse Leakage Characteristics

Package Outline Dimensions DO-214AC (SMA)



Dimensions in inches and (millimeters)

Order Information

Device	Package	Marking	Carrier	Quantity
GSFR2500J	DO-214AC (SMA)	FR250	Tape & Reel	7,500pcs / Reel