

Features

- Construction utilizes void-free molded plastic technique
- Low profile package
- High forward surge current capability
- High temperature soldering guaranteed: 250°C/10 seconds



DO-214AC (SMA)

Mechanical Data

- Case: JEDEC DO-214AC (SMA) molded plastic body
- Terminals: Solderable per MIL-STD-750, method 2026

Maximum Ratings and Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified.)

Parameter	Symbol	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 $T_C=125^\circ\text{C}$	$I_{F(AV)}$	1	A	
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	30	A	
Maximum Instantaneous Forward Voltage at 1A	V_F	2.2	V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$	10	μA
		$T_A=100^\circ\text{C}$	200	
Typical Junction Capacitance ¹	C_J	15	pF	
Typical Thermal Resistance, junction to ambient	$R_{\theta JA}$	50	$^\circ\text{C}/\text{W}$	
Operating Junction Temperature Range	T_J	-55 To +150	$^\circ\text{C}$	
Storage Temperature Range	T_{STG}	-55 To +150	$^\circ\text{C}$	

Notes:

- Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

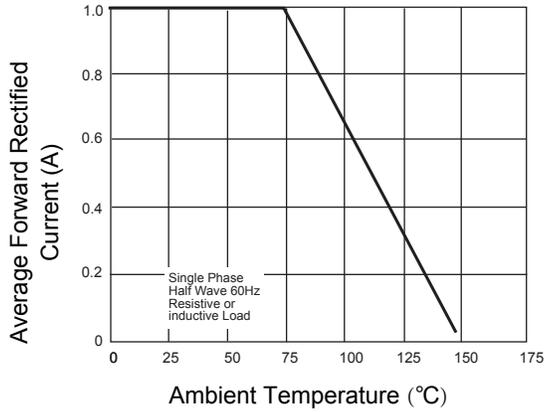


Figure 1. Forward Current Derating Curve

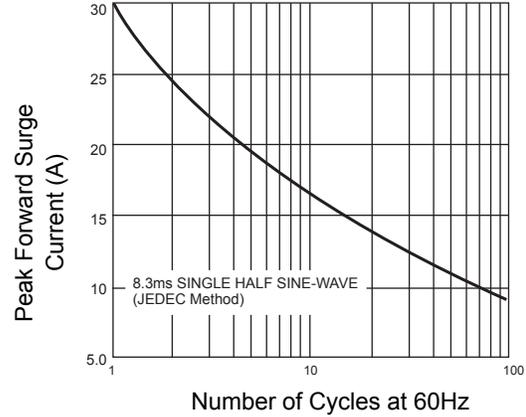


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

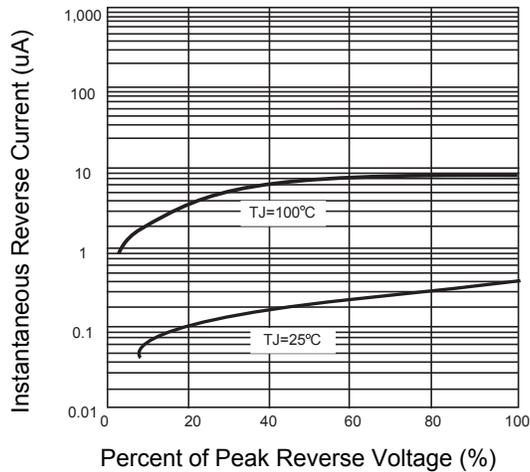


Figure 3. Typical Reverse Characteristics

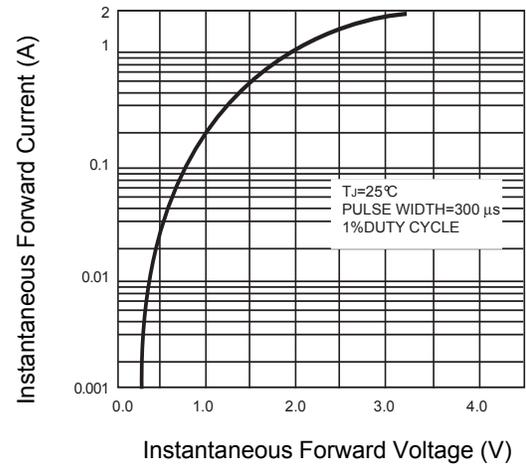
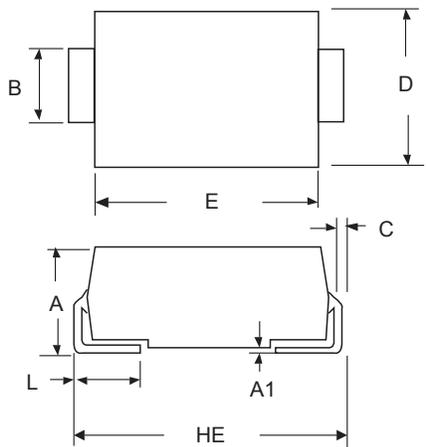


Figure 4. Typical Instantaneous Forward Characteristics

Package Outline Dimensions DO-214AC (SMA)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	1.950	2.420	0.077	0.095
A1	-	0.203	-	0.008
B	1.300	2.100	0.051	0.083
C	0.152	0.305	0.006	0.012
D	2.500	2.800	0.980	0.110
E	3.990	4.500	0.157	0.177
HE	5.000	5.200	0.197	0.205
L	0.760	1.520	0.030	0.060

Order Information

Device	Package	Marking	Packaging	SPQ
GS1TA3000	DO-214AC (SMA)	S1T	Tape & Reel	7,500 pcs / Reel