

GSS1A Series

Surface Mount Standard Recovery Glass Passivated

Product Description

Reverse Voltage 50V to 1600V Forward Current 1.0A

Features

- High Current Capability
- High Surge Current Capability
- Low Reverse Current
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 Qualified
- Lead(Pb)-Free

Mechanical Data

- Case Material : Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals : Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity : Cathode Band
- Weight : 0.062 grams (approximate)

Packages



SMA (DO-214AC)

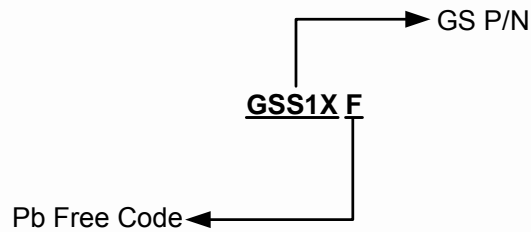
Marking Information

P/N	Package	Part Marking
GSS1AF	SMA(DO-214AC)	WTYYWW S1A.
GSS1BF	SMA(DO-214AC)	WTYYWW S1B.
GSS1DF	SMA(DO-214AC)	WTYYWW S1D.
GSS1GF	SMA(DO-214AC)	WTYYWW S1G.
GSS1JF	SMA(DO-214AC)	WTYYWW S1J.
GSS1KF	SMA(DO-214AC)	WTYYWW S1K.
GSS1MF	SMA(DO-214AC)	WTYYWW S1M.
GSS1TF	SMA(DO-214AC)	WTYYWW S1T.
GSS1WF	SMA(DO-214AC)	WTYYWW S1W.

※ "WT" GS Code & "YYWW" Date Code

※ "S1X" GS P/N & "." Halogen Free

Ordering Information



Part Number	Package	Quantity
GSS1AF Series	SMA(DO-214AC)	5000 PCS

Electrical Characteristics

$T_A=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Conditions	S1A	S1B	S1D	S1G	S1J	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	50	100	200	400	600	V
V_{RMS}	Maximum RMS Voltage	35	70	140	280	420	V
V_{DC}	Maximum DC Blocking Voltage	50	100	200	400	600	V
Symbol	Conditions	S1K	S1M	S1T	S1W	Unit	
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	800	1000	1300	1600	V	
V_{RMS}	Maximum RMS Voltage	560	700	910	1120	V	
V_{DC}	Maximum DC Blocking Voltage	800	1000	1300	1600	V	
V_F	Maximum Instantaneous Forward Voltage At $I_F=1\text{A}$ @ $T_A=25^{\circ}\text{C}$	1.1				V	
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_A=25^{\circ}\text{C}$	5			μA	
		$T_A=100^{\circ}\text{C}$	100			μA	
I_F	Maximum Average Forward Rectified Current	1.0				A	
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed On Rated Load	30				A	
C_J	Typical Junction Capacitance(Note 1)	50				pF	
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	100				$^{\circ}\text{C}/\text{W}$	
T_J	Junction Temperature Range	-55 to +150				$^{\circ}\text{C}$	
T_{STG}	Storage Temperature Range	-55 to +150				$^{\circ}\text{C}$	

Notes : 1.Measured at 1.0MHz and applied reverse voltage of 4.0V DC

Typical Characteristics

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

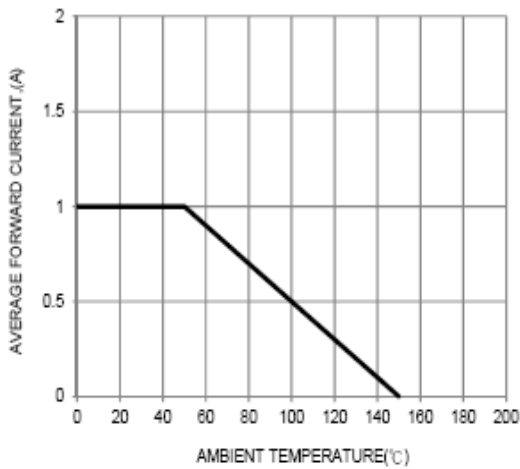


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

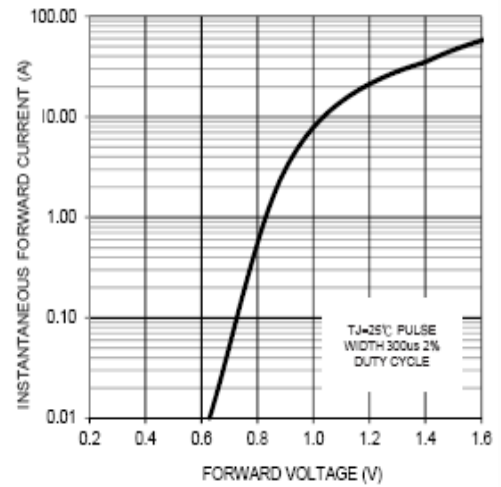


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

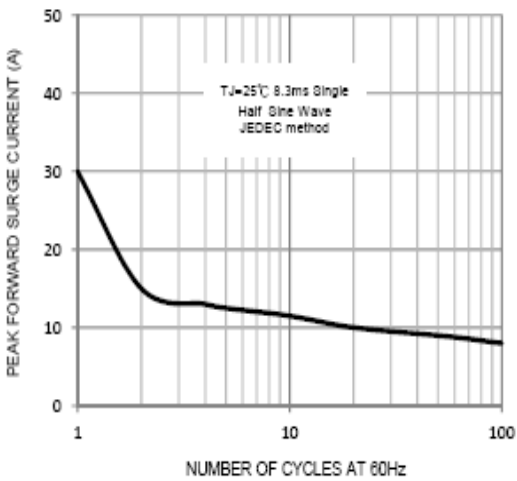


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

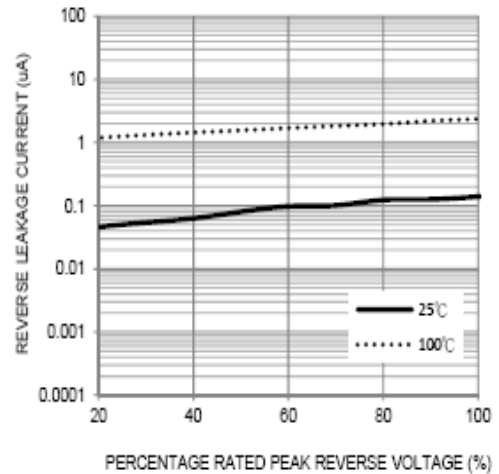
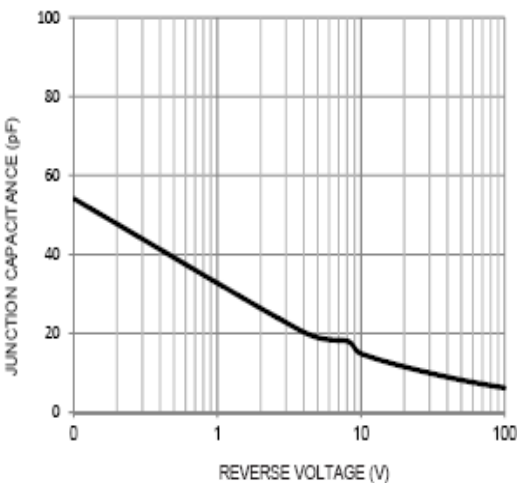
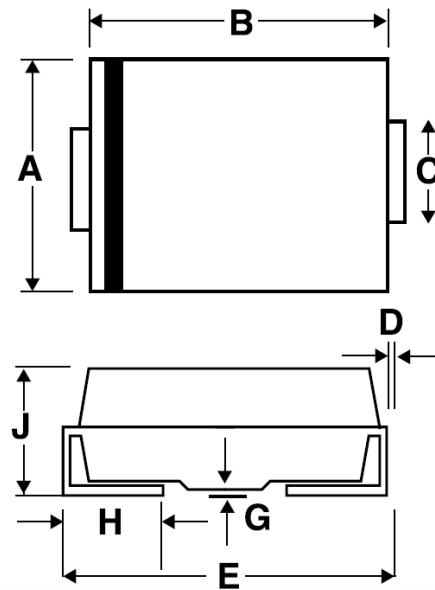


FIG. 5-TYPICAL JUNCTION CAPACITANCE



Package Dimension

SMA-(DO-214AC)







Dimensions





Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.20	2.92	0.086	0.114
B	4.00	4.60	0.157	0.181
C	1.27	1.63	0.050	0.064
D	0.15	0.31	0.005	0.012
E	4.48	5.59	0.176	0.220
G	0.10	0.20	0.003	0.007
H	0.76	1.52	0.029	0.059
J	1.70	2.62	0.066	0.103



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