

Features

- $I_{F(AV)}$ 1A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode



SMA top view



Schematic diagram

Applications

- Rectifier

Marking

- G1X
X : From A To M



Halogen-Free

Maximum Ratings($T_a=25^{\circ}\text{C}$ unless otherwise noted)

Symbol	Parameter	Conditions	AA	BA	DA	GA	JA	KA	MA
V_{RRM}	Maximum Repetitive Peak Reverse Voltage		50	100	200	400	600	800	1000
V_{RMS}	Maximum RMS voltage		35	70	140	280	420	560	700
V_{DC}	Maximum DC Blocking Voltage		50	100	200	400	600	800	1000
$I_{F(AV)}$	Average Forward Current	60Hz Half-sine wave, Resistance load, $T_L=100^{\circ}\text{C}$	1						
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	30						
T_J	Junction Temperature		-55~+150						
T_{stg}	Storage Temperature		-55~+150						

ELECTRICAL CHARACTERISTICS($T_a=25^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Condition	Max	Unit
V_{FM}	Peak Forward Voltage	$I_F=1.0\text{A}$	1	V
I_{RRM1}	Maximun Peak Reverse Current	$V_{RM}=V_{RRM}$ $T_J=25^{\circ}\text{C}$	5	μA
I_{RRM2}	Maximun Peak Reverse Current	$V_{RM}=V_{RRM}$ $T_J=125^{\circ}\text{C}$	50	
T_{rr}	Reverse Recovery Time(Typical)	$I_F=0.5\text{A}$ $I_R=1\text{A}$ $I_{RR}=0.25\text{A}$	1.8	us
C_j	Juction Capacitance (Typical)	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C.	7	pF
$R_{\theta J-A}$	Typical Thermal Resistance	Between junction and ambient	55	$^{\circ}\text{C/W}$
$R_{\theta J-L}$	Typical Thermal Resistance	Between junction and lead	25	$^{\circ}\text{C/W}$

Typical Operating Characteristics

Fig.1 Forward Current Derating Curve

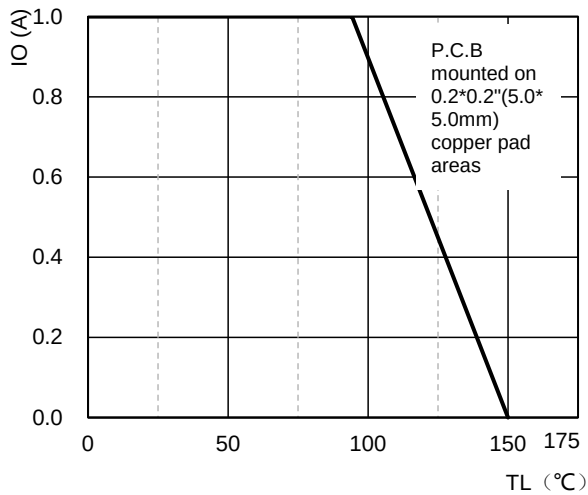


Fig.2 Maximum Non-Repetitive Forward Surge Current

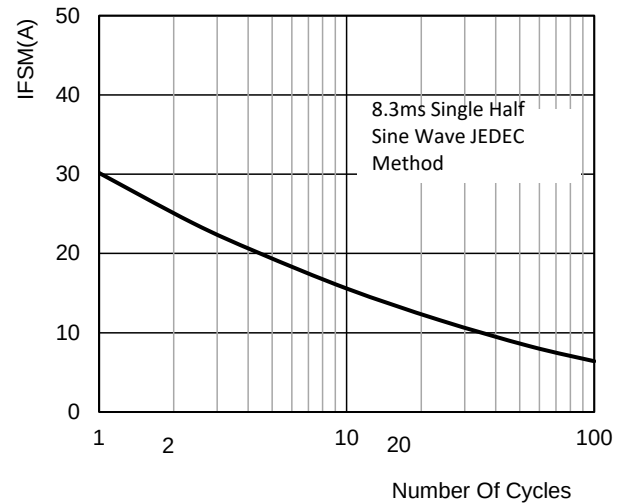


Fig.3 Typical Forward Characteristis

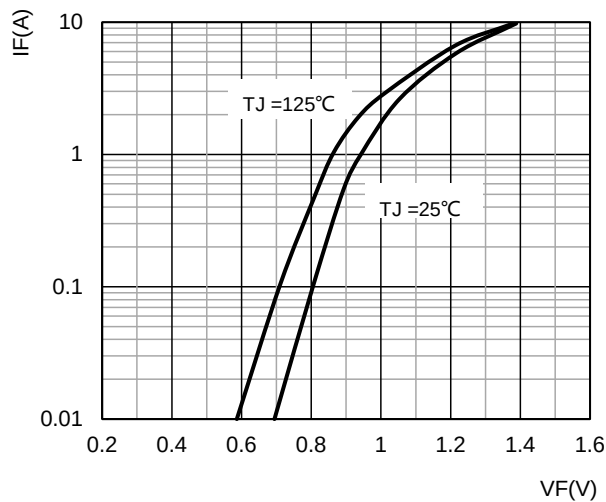
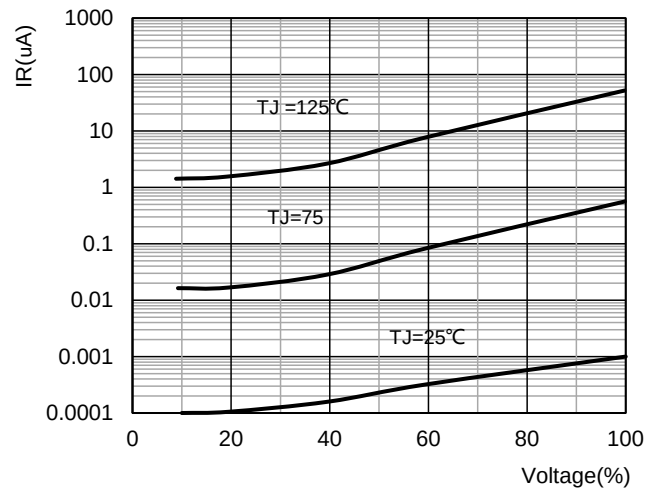


Fig.4 Typical Reverse Characteristis

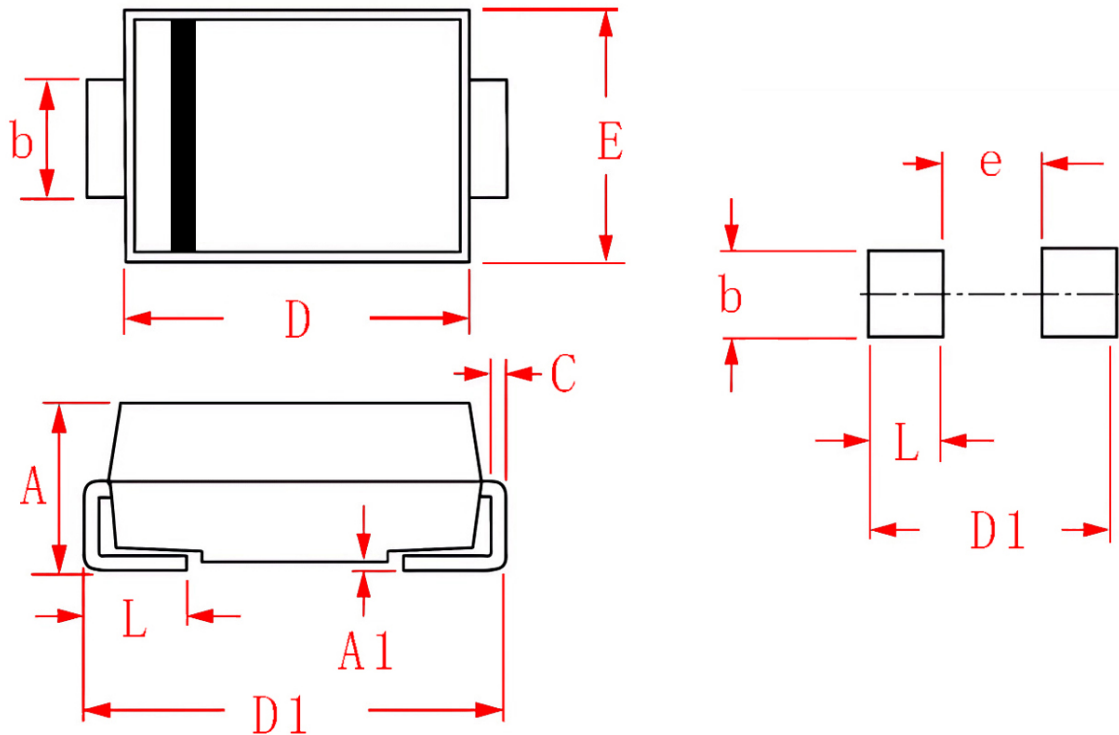


Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
GS1AA	SMA	G1A	2,000	10,000	100,000	7"reel
GS1BA		G1B				
GS1DA		G1D				
GS1GA		G1G				
GS1JA		G1J				
GS1KA		G1K				
GS1MA		G1M				

SMA Package information

SMA (DO-214AC)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.900	2.200	0.075	0.087
A1	0.050	0.200	0.002	0.008
b	1.300	1.600	0.051	0.063
C	0.150	0.310	0.006	0.012
D	4.000	4.500	0.157	0.177
D1	4.700	5.200	0.185	0.205
E	2.300	2.700	0.090	0.106
e	-	1.880	-	0.074
L	0.900	1.500	0.035	0.059