

GSDE1□AF Series

Fast Recovery Diode

Product Description

Reverse Voltage 200V to 600V.
Forward Current 1.0A



Features

- 35ns Max Reverse Recovery Time
- RoHS Compliant and Halogen Free

Mechanical Data

- SMA (DO-214AC) Package
- Polarity: Color Band denotes Cathode End

Package and Pin Assignment

SMA (DO-214AC)		Equivalent Circuit
		
Pin	Description	
1	Anode	
2	Cathode	

Ordering and Marking Information

Ordering Information			
Part Number	V_{RRM}	Marking Code	Quantity/Reel
GSDE1DAF	200	ES1D	5000 PCS
GSDE1GAF	400	ES1G	5000 PCS
GSDE1JAF	600	ES1J	5000 PCS

* GSDE1DAF can be selected if required V_{RRM} of 50V, 100V and 150V.

GSDE1□AF

- | | | |
|--|--|--|
| <p>- Product Code:
GSDE1</p> <p>- Green Level:
F for RoHS Compliant and Halogen Free</p> | <p>- Voltage Code:
□ is D, G or J stands for Maximum repetitive peak reverse voltage.</p> | <p>- Package Code:
A for SMA (DO-214AC) Package</p> |
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Marking Information

ES1 1

- **Product Code:**

ES1

- **Voltage Code:**

1 is D, G or J stands for
Maximum repetitive peak
reverse voltage.

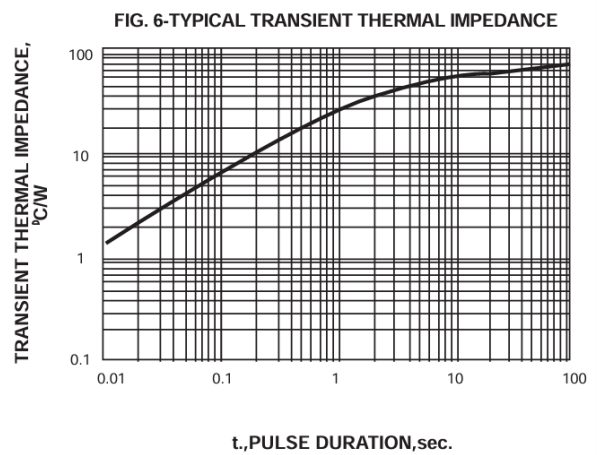
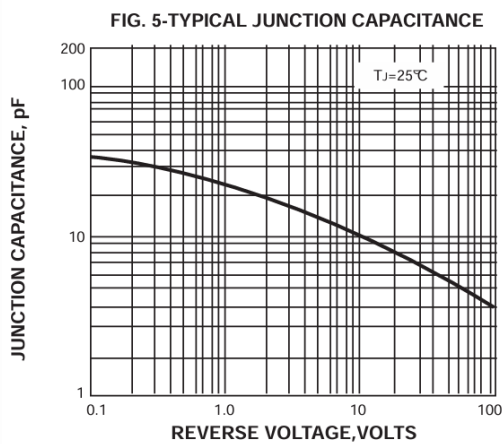
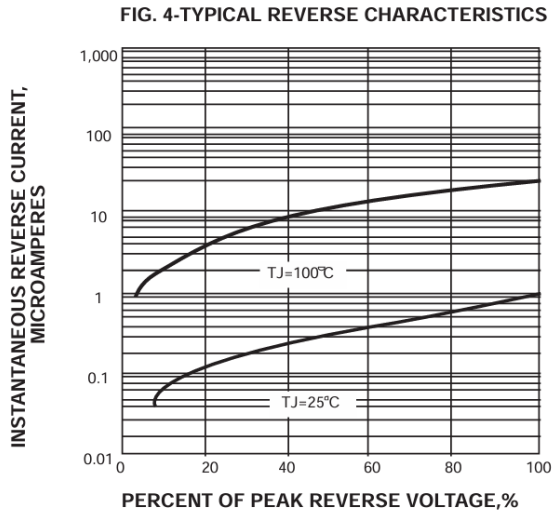
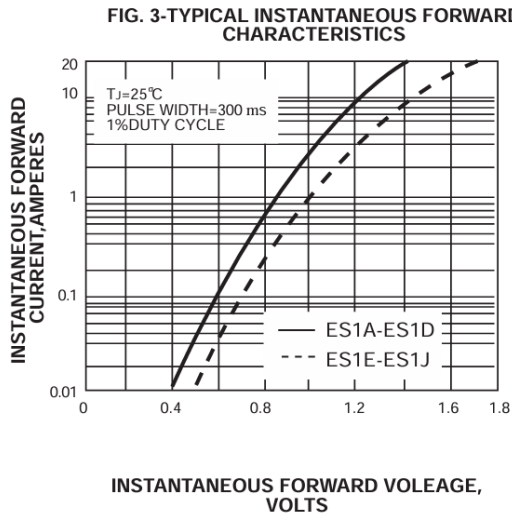
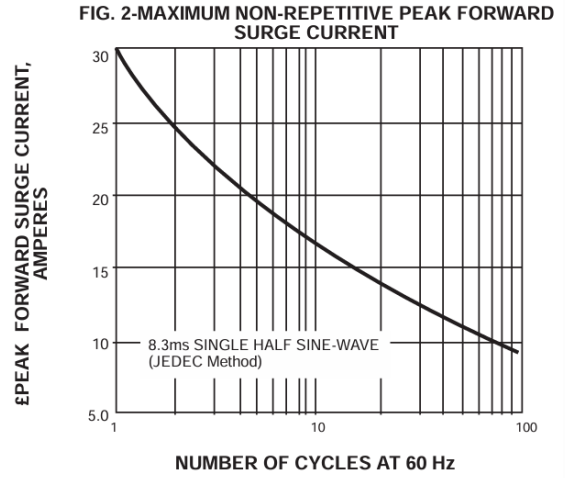
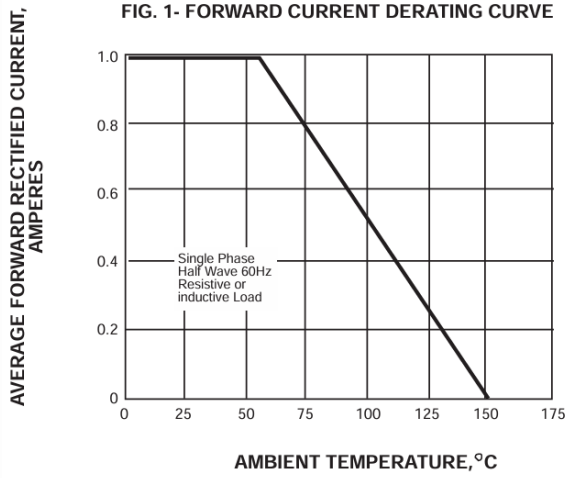
Electrical Characteristics (Ratings at 25°C Ambient Temperature Unless Otherwise Specified.)

Symbol	Conditions	E1D	E1G	E1J	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	200	400	600	V
V_{RMS}	Maximum RMS Voltage	140	280	420	V
V_{DC}	Maximum DC Blocking Voltage	200	400	600	V
$I_{F(AV)}$	Maximum Average Forward Rectified Current	1			A
I_{FSM}	Peak Forward Surge Current (8.3ms Single Half Sinewave)	30			A
V_F	Maximum Forward Voltage at 1.0A	0.95	1.25	1.7	V
I_R	Maximum Reverse Leakage Current at rated V_R	$T_A = 25^\circ\text{C}$	5		μA
		$T_A = 100^\circ\text{C}$	50		μA
t_{rr}	Maximum reverse recovery time ⁽¹⁾	35			ns
C_J	Typical Junction Capacitance ⁽²⁾	15			pF
$R_{\theta JA}$	Typical Thermal Resistance ⁽³⁾	60			$^\circ\text{C}/\text{W}$
T_J	Operating Junction Temperature Range	-55 to +150			$^\circ\text{C}$
T_{STG}	Storage Temperature Range	-55 to +150			$^\circ\text{C}$

NOTES:

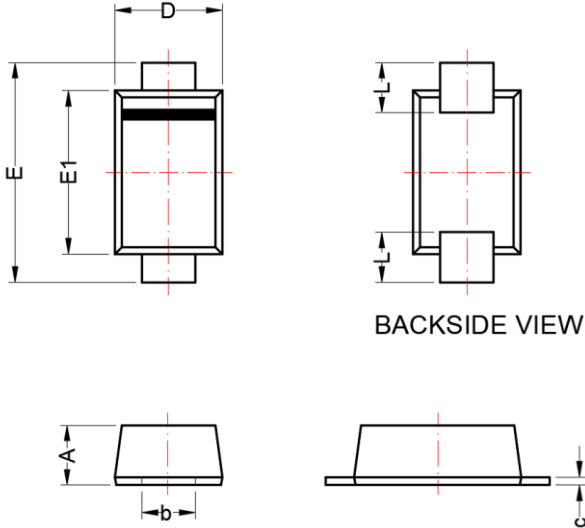
1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
2. Measured at 1MHz and applied reverse voltage of 4.0V_{DC}
3. Mounted with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas

Typical Characteristics (Ratings at 25°C Ambient Temperature Unless Otherwise Specified.)

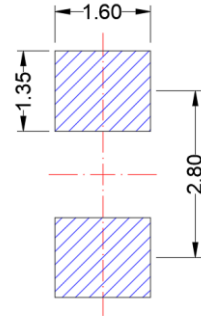


SMA (DO-214AC)

Package Dimension



Recommended Land Pattern



(Unit: mm)

Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	0.80	1.10	0.031	0.043
b	0.50	1.20	0.020	0.047
D	1.50	1.90	0.059	0.075
E	3.30	3.80	0.130	0.150
E1	2.45	2.75	0.096	0.108
c	0.05	0.20	0.002	0.008
L	0.70	0.90	0.028	0.035





NOTE:



1. Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.
2. Terminals are partially uncovered on the bottom of package body

NOTICE

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