

GSDU1□AF Series

Fast Recovery Diode

Product Description

Reverse Voltage 200V to 1000V.
Forward Current 1.0A



Features

- 50/75ns 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
GSDU1DAF	200	US1D	5000 PCS
GSDU1GAF	400	US1G	5000 PCS
GSDU1MAF	1000	US1M	5000 PCS

* GSDU1DAF can be selected if required V_{RRM} of 50V, 100V and 150V.

* GSDU1MAF can be selected if required V_{RRM} of 600V and 800V.

GSDU1□AF

- **Product Code:**

GSDU1

- **Voltage Code:**

□ is D, G or M stands for Maximum repetitive peak reverse voltage.

- **Package Code:**

A for SMA (DO-214AC) Package

- **Green Level:**

F for RoHS Compliant and Halogen Free

Marking Information

US1 1

- Product Code:

US1

- Voltage Code:

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

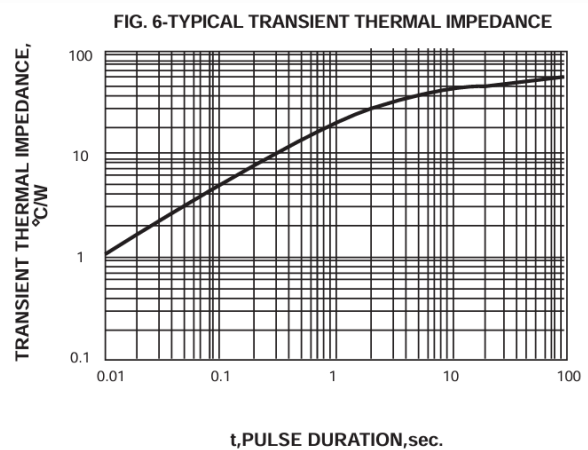
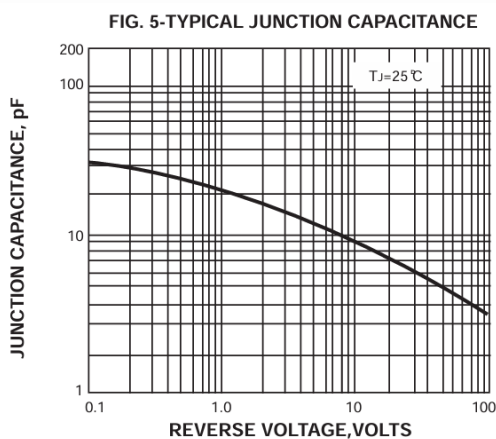
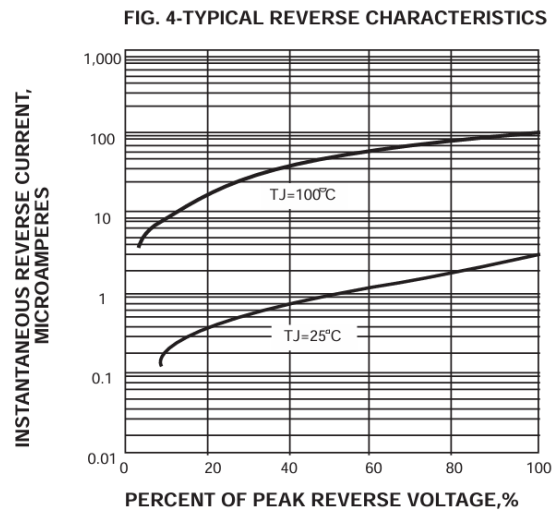
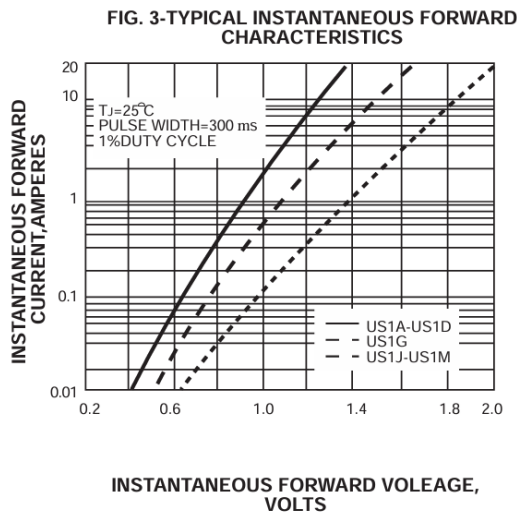
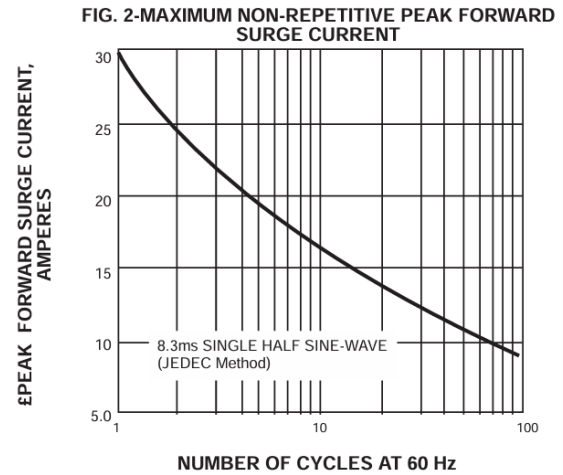
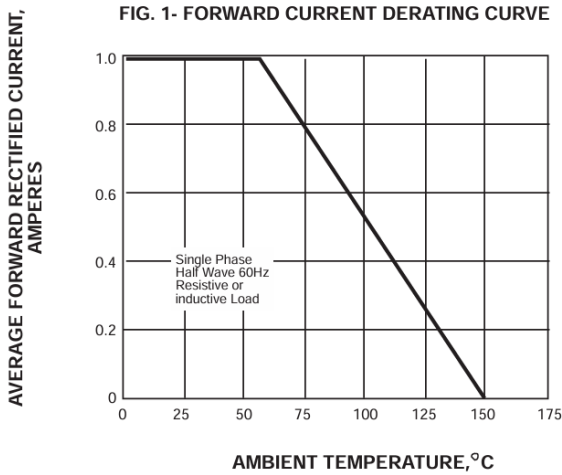
Electrical Characteristics (Ratings at 25°C Ambient Temperature Unless Otherwise Specified.)

Symbol	Conditions		U1D	U1G	U1M	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage		200	400	1000	V
V_{RMS}	Maximum RMS Voltage		140	280	700	V
V_{DC}	Maximum DC Blocking Voltage		200	400	1000	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		1.0	1.3	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⁾		50		75	ns
C_J	Typical Junction Capacitance ⁽²⁾		15			pF
$R_{\theta JA}$	Typical Thermal Resistance ⁽³⁾		60			$^\circ\text{C/W}$
T_J	Operating Junction Temperature Range		-55 to +150			$^\circ\text{C}$
T_{STG}	Storage Temperature Range		-55 to +150			$^\circ\text{C}$

NOTES:

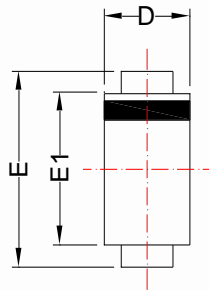
1. Measured with $I_F=0.5\text{A}$, $I_R=1\text{A}$, $I_{rr}=0.25\text{A}$.
2. Measured at 1MHz and applied reverse voltage of 4.0V_{DC}
3. Mounted with 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas

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

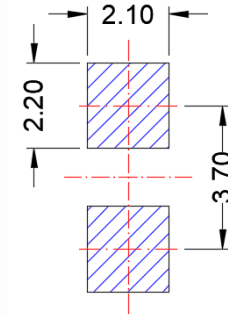


SMA (DO-214AC)

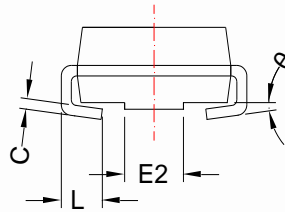
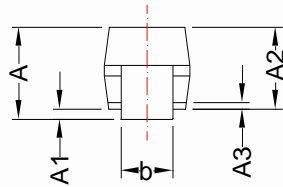
Package Dimension



Recommended Land Pattern



(Unit: mm)



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	1.70	2.90	0.067	0.114
A1	1.70	---	0.067	---
A2	0.00	0.20	0.000	0.008
A3	0.05	0.30	0.002	0.012
b	1.20	1.70	0.047	0.067
c	0.15	0.41	0.006	0.016
D	2.18	2.95	0.086	0.116
E	4.70	5.60	0.185	0.220
E1	3.90	4.70	0.154	0.185
E2	1.40	1.90	0.055	0.075
L	0.75	1.6	0.030	0.063
θ	0°	8°	0°	8°





Note:



Dimensions are exclusive of Burrs, Mold Flash & Tie Bar extrusions.

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