GSDSS3□□AF Series

Schottky Barrier Diode

Product Description

Reverse Voltage 40V to 200V.
Forward Current 3.0A

Features

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- RoHS Compliant and Halogen Free

Mechanical Data

- Case : Molded Plastic, SMA Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- 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	**Package**	**Marking Code**	**Quantity/Reel**
GSDSS34AF	SMA	SS34	5000 PCS
GSDSS36AF	SMA	SS36	5000 PCS
GSDSS315AF	SMA	SS315	5000 PCS
GSDSS320AF	SMA	SS320	5000 PCS

GSDSS3 1 1 A F

- **Product Code:** GSDSS3
- **Voltage Code:** 1 1 is 4, 6, 15 and 20. For examples 4 stands for 40V and 20 stands for 200V
- **Package Code:** **A** for SMA Package
- **Green Level:** **F** for RoHS Compliant and Halogen Free

Marking Information	
SS3 1 1	
- **Product Code:** SS3	- **Voltage Code:** 1 1 is 4, 6, 15 and 20. For examples 4 stands for 40V and 20 stands for 200V

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

Symbol	Conditions		34AF	36AF	315AF	320AF	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage		40	60	150	200	V
V_{RMS}	Maximum RMS Voltage		28	42	105	140	V
V_{DC}	Maximum DC Blocking Voltage		40	60	150	200	V
$I_{F(AV)}$	Maximum Average Forward Rectified Current		3.0				A
I_{FSM}	Peak Forward Surge Current (8.3ms Single Half Sine-Wave)		80				A
V_F	Maximum Forward Voltage at 3.0A (Note1)		0.55	0.7	0.85	0.95	V
I_R	Maximum Reverse Leakage Current at rated V_R	T_A = 25°C	0.5				mA
		T_A = 100°C	20	10			
C_J	Typical Junction Capacitance (1)		500	300			pF
$R_{\theta JA}$	Typical Thermal Resistance (2)		88				°C/W
T_J	Operating Junction Temperature Range		-65 to +150				°C
T_{STG}	Storage Temperature Range		-65 to +150				°C

NOTES:
1. Measured at 1MHz and applied reverse voltage of 4.0 V_{DC}.
2. 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.)

FIG. 1- FORWARD CURRENT DERATING CURVE

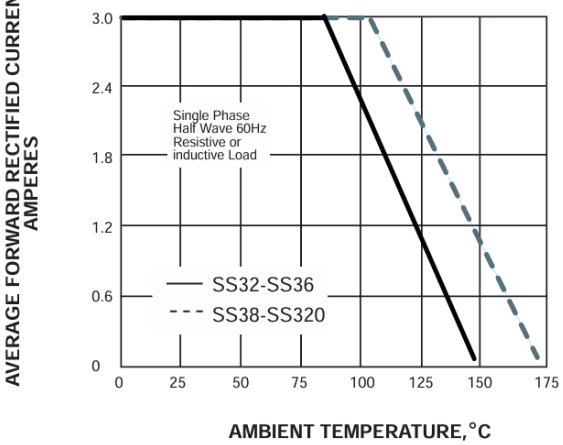


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

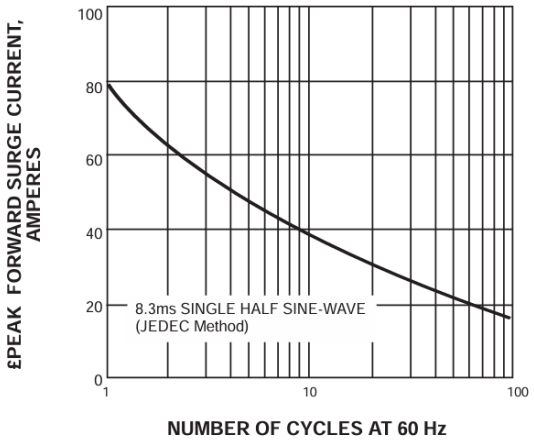


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

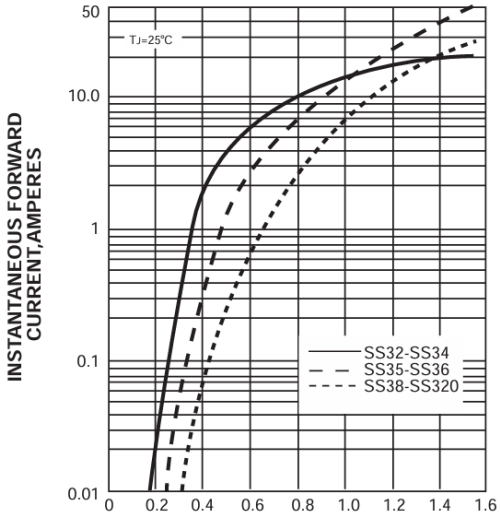


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

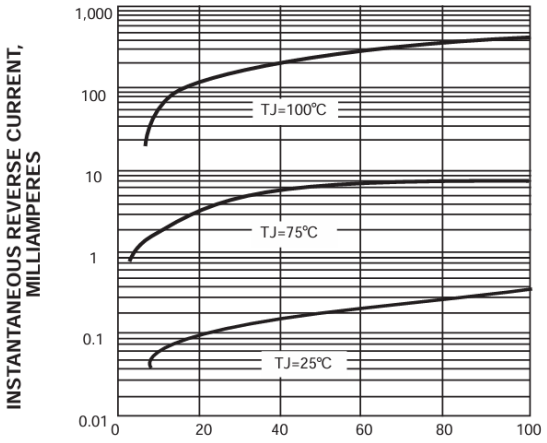


FIG. 5-TYPICAL JUNCTION CAPACITANCE

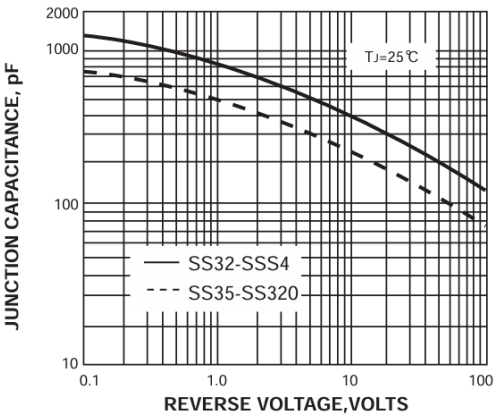
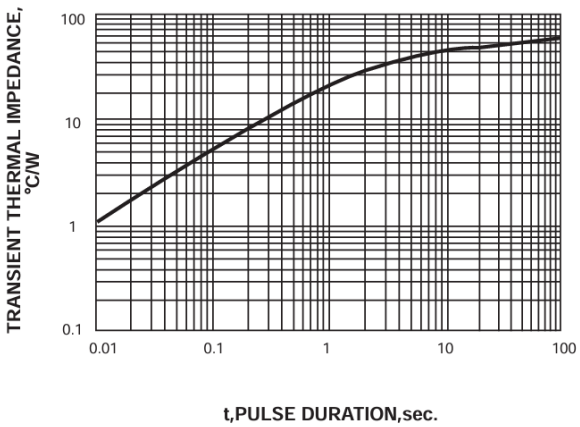
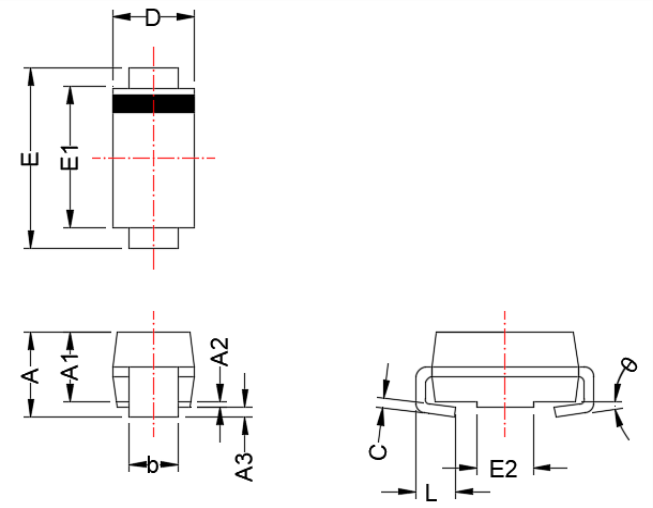


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

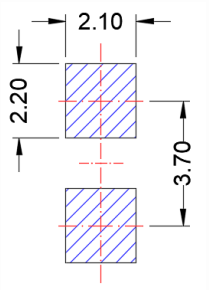


SMA (DO-214AC)

Package Dimension



Recommended Land Pattern



(Unit: mm)

Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	1.90	2.90	0.075	0.114
A1	1.70	2.70	0.067	0.106
A2	---	0.20	---	0.008
A3	---	0.30	---	0.012
b	1.20	1.70	0.047	0.067
c	0.14	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	4.60	0.154	0.181
E2	1.40	1.90	0.055	0.075
L	0.75	1.6	0.030	0.063
θ	0°	8°	0°	8°

NOTE:
DIMENSION DOES NOT INCLUDE MOLD FLASH,PROTRUSIONS OR GATE BURRS.

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