GSDSS3□□A1F 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, SMAF Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity: Color Band denotes Cathode End

Package and Pin Assignment

SMAF	Equivalent Circuit
	

Pin	Description
1	Anode
2	Cathode

Ordering and Marking Information

Ordering Information			
Part Number	**Package**	**Marking Code**	**Quantity/Reel**
GSDSS34A1F	SMAF	SS34F	3000 PCS
GSDSS36A1F	SMAF	SS36F	3000 PCS
GSDSS310A1F	SMAF	SS310F	3000 PCS
GSDSS315A1F	SMAF	SS315F	3000 PCS
GSDSS320A1F	SMAF	SS320F	3000 PCS

GSDSS3 1 1 A1 F

- **Product Code:** GSDSS3
- **Voltage Code:** 1 1 is 4, 6, 10, 15 and 20. For examples 4 stands for 40V and 20 stands for 200V
- **Package Code:** **A1** for SMAF Package
- **Green Level:** **F** for RoHS Compliant and Halogen Free

Marking Information		
SS3 1 1 F		
- **Product Code:** SS3	- **Voltage Code:** 1 1 is 4, 6,10, 15 and 20. For examples 4 stands for 40V and 20 stands for 200V	- **Green Level:** **F** for RoHS Compliant and Halogen Free

Electrical Characteristics

(Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%.)

Symbol	Description	34A1F	36A1F	310A1F	315A1F	320A1F	Unit
V_{RRM}	Maximum Repetitive Peak Reverse Voltage	40	60	100	150	200	V
V_{RMS}	Maximum RMS Voltage	28	42	70	105	140	V
V_{DC}	Maximum DC Blocking Voltage	40	60	100	150	200	V
$I_{(AV)}$	Maximum Average Forward Rectified Current	3.0					A
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half-Sine-Wave Superimposed on rated Load (JEDEC Method)	80					A
V_F	Maximum Forward Voltage at 3.0A	0.55	0.70	0.85		0.95	V
I_R	Maximum Reverse Current at Rated DC Blocking Voltage T_A=25℃	0.5		0.2			mA
	T_A=100℃	20.0		10.0			mA
C_J	Typical Junction Capacitance (1)	550	320				pF
$R_{\theta JA}$	Typical Thermal Resistance [1]	65					°C/W
T_J	Junction Temperature Range	-65 to 125		-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

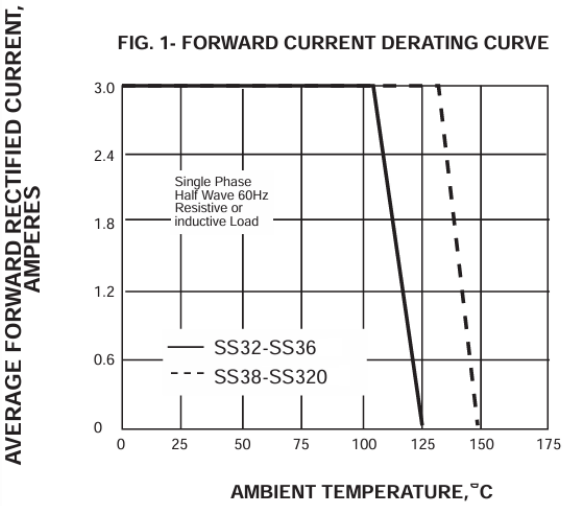


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

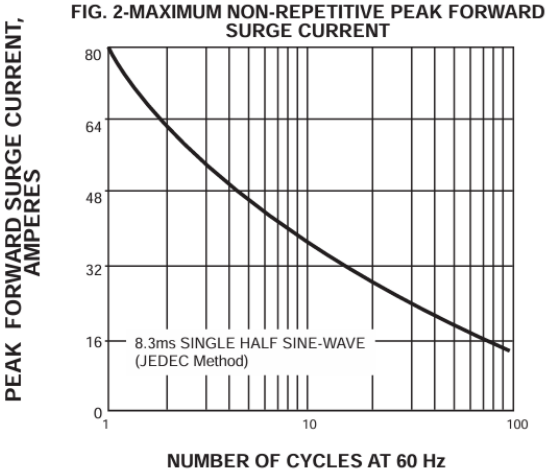


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

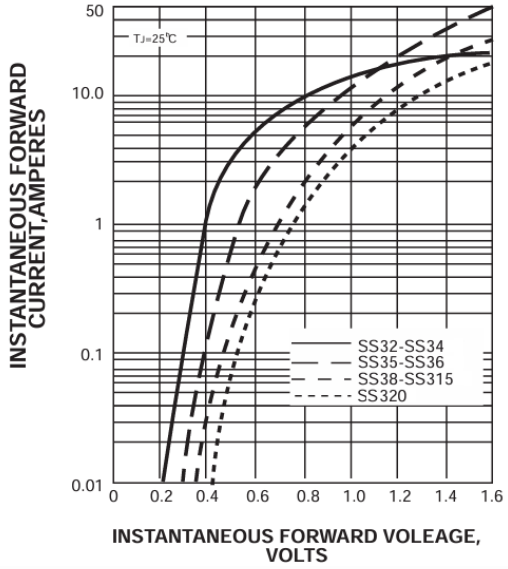


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

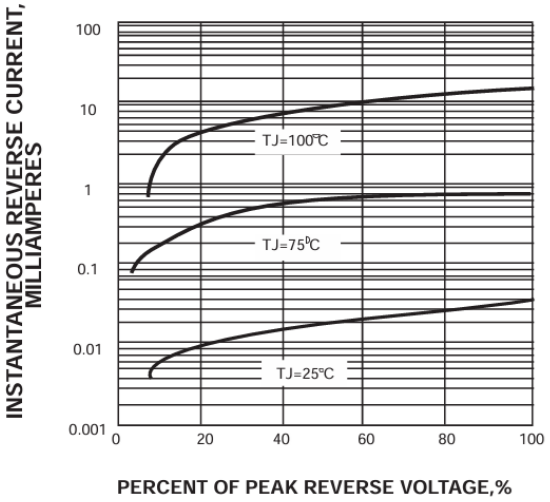


FIG. 5-TYPICAL JUNCTION CAPACITANCE

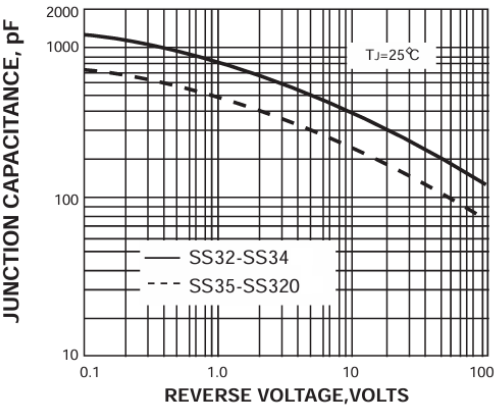
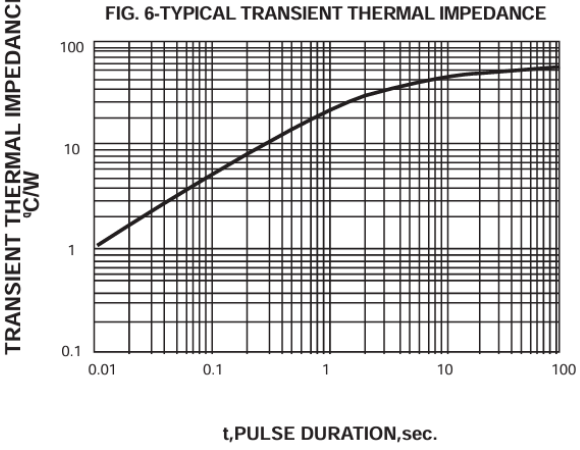
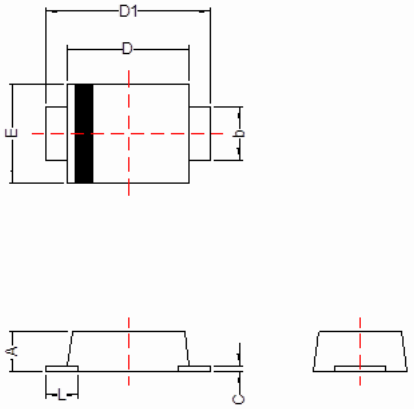


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

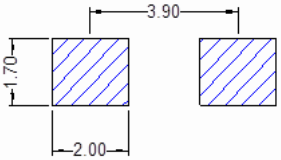


SMAF

Package Dimension



Recommended Land Pattern



(Unit: mm)

Dimensions				
SYMBOL	Millimeters		Inches	
	MIN	MAX	MIN	MAX
A	0.90	1.30	0.035	0.051
b	1.20	1.60	0.047	0.063
D	3.25	3.75	0.128	0.147
D1	4.30	4.90	0.169	0.193
E	2.30	2.70	0.091	0.106
c	0.05	0.3	0.002	0.012
L	1.20 MAX		0.047 MAX	

NOTE:
Dimensions are exclusive of Burrs, Mold Flash and Tie Bar extrusions.

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