

GSDSS1□□AF Series

Schottky Barrier Diode

Product Description

Reverse Voltage 40V to 200V.
Forward Current 1.0A


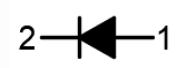
Features

- Low Forward Voltage Drop
- Low Power Loss, High Efficiency
- High Current Capacity
- 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
GSDSS14AF	SMA	SS14	5000 PCS
GSDSS16AF	SMA	SS16	5000 PCS
GSDSS110AF	SMA	SS110	5000 PCS
GSDSS120AF	SMA	SS120	5000 PCS

GSDSS1 **1** **1** **2** **3**

- **Product Code:**

GSDSS1

- **Voltage Code:**

1 **1** is 4, 6, 10 and 20.

For examples 4 stands for 40V
and 20 stands for 200V

- **Package Code:**

2 is A for SMA Package

- **Green Level:**

3 is F for RoHS Compliant and
Halogen Free

Marking Information

SS1 1 1

- **Product Code:**

SS1

- **Voltage Code:**

1 1 is 4, 6, 10 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		14AF	16AF	110AF	120AF	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage		40	60	100	200	V
V_{RMS}	Maximum RMS Voltage		28	42	71	140	V
V_{DC}	Maximum DC Blocking Voltage		40	60	100	200	V
$I_{F(AV)}$	Maximum Average Forward Rectified Current		1.0				A
I_{FSM}	Peak Forward Surge Current (8.3ms Single Half Sine-Wave)		30				A
V_F	Maximum Forward Voltage at 1.0A (Note1)		0.55	0.7	0.85	0.95	V
I_R	Maximum Reverse Leakage Current at rated V_R	$T_A = 25^\circ\text{C}$	0.5			0.2	mA
		$T_A = 100^\circ\text{C}$	10			5	
T_J	Operating Junction Temperature Range		-65 to +125		-65 to +150		°C
T_{STG}	Storage Temperature Range		-65 to +150				°C

NOTES:

1. Pulse test: 300µs pulse width, 1% duty cycle
2. P.C.B. 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.)

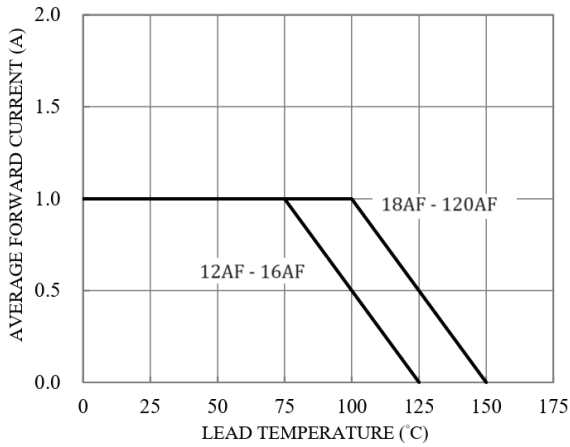


Fig.1-FORWARD CURRENT DERATING CURVE

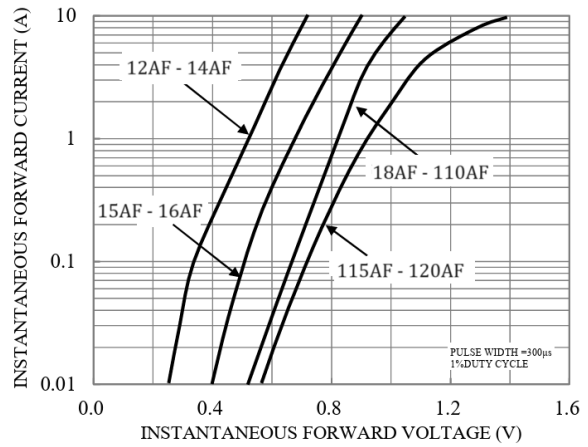


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

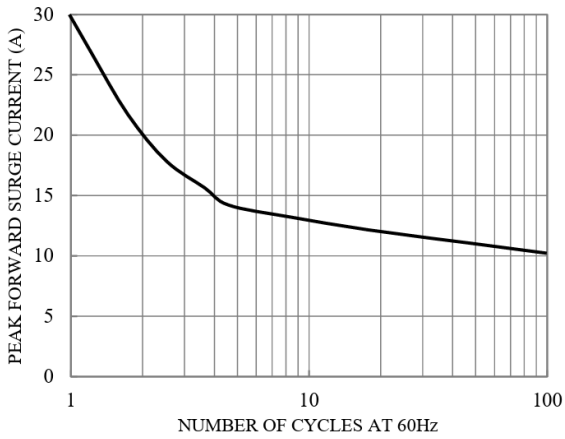
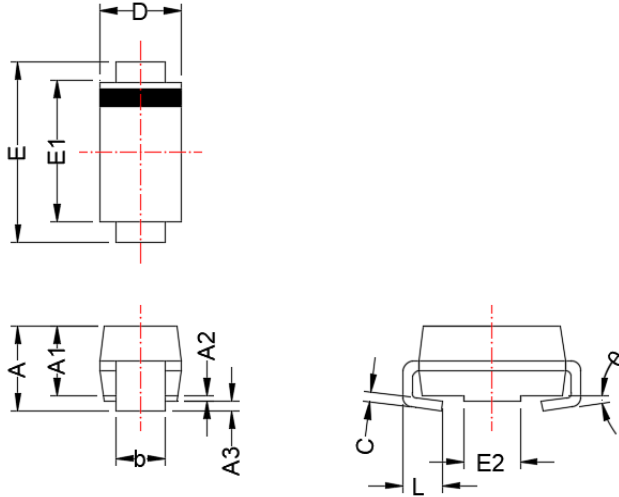


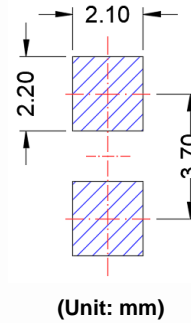
Fig.3-MAXIMUM NON-REPETITIVE SURGE CURRENT

SMA (DO-214AC)

Package Dimension



Recommended Land Pattern







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 D DOES NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

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