

GSDSL12 Series

Low VF Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 20V To 40V Forward Current 1.0A

Features

- Plastic package has Underwriters Laboratory
- Flammability Classification 94V-O Utilizing Flame Retardant Epoxy Molding Compound
- For surface mounted applications
- Exceeds environmental standards of MIL-S-19500 / 228
- Low leakage current
- Lead(Pb)-Free

Mechanical Data

- Case : Molded plastic, JEDEC DO-214AC
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Indicated by cathode band
- Mounting Position : Any
- Weight : 0.05 grams

Packages



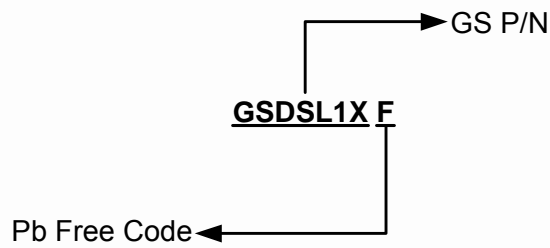
SMA-1

Marking Information

Part Number	Package	Marking
GSDSL12F	SMA-1	WTYYWW SL12.
GSDSL13F	SMA-1	WTYYWW SL13.
GSDSL14F	SMA-1	WTYYWW SL14.

※ "WT" GS Code & "YYWW" Date Code
※ "SL1X" GS P/N & "." Halogen Free

Ordering Information



Part Number	Package	Quantity
GSDSL12F	SMA-1	2000 PCS
GSDSL13F	SMA-1	
GSDSL14F	SMA-1	

Maximum Ratings and Electrical Characteristics

Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Symbol	Conditions	GSDSL12	GSDSL13	GSDSL14	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage	20	30	40	V
V_{RMS}	Maximum RMS Voltage	14	21	28	V
V_{DC}	Maximum DC Blocking Voltage	20	30	40	V
V_F	Maximum Instantaneous Forward Voltage	0.38	0.40	0.40	V
$I_{F(AV)}$	Forward Rectified Current (FIG.2)	1.0			A
I_{FSM}	Peak Forward Surge Current, 8.3ms Single Half Sine-Wave Superimposed on Rated Load(JEDEC Method)	30			A
I_R	Maximum DC Reverse Current At Rated DC Blocking Voltage	$T_J=25^{\circ}C$	1.0		mA
		$T_J=100^{\circ}C$	10		
C_J	Typical Junction Capacitance	130			pF
$R_{\theta JA}$	Typical Thermal Resistance	80			$^{\circ}C/W$
T_J	Junction Temperature Range	-55 to +125			$^{\circ}C$
T_{STG}	Storage Temperature Range	-55 to +150			$^{\circ}C$

Typical Characteristics

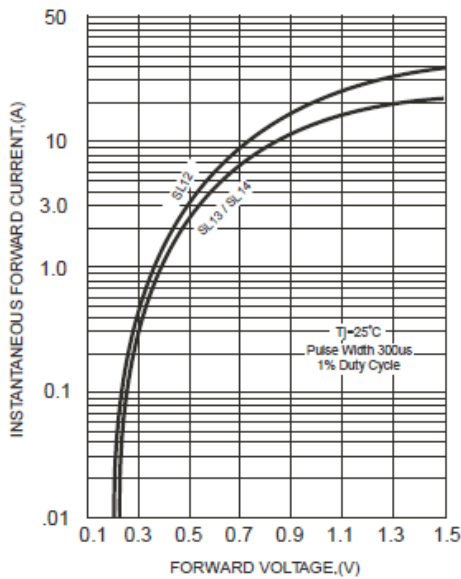


FIG.1 TYPICAL FORWARD CHARACTERISTICS

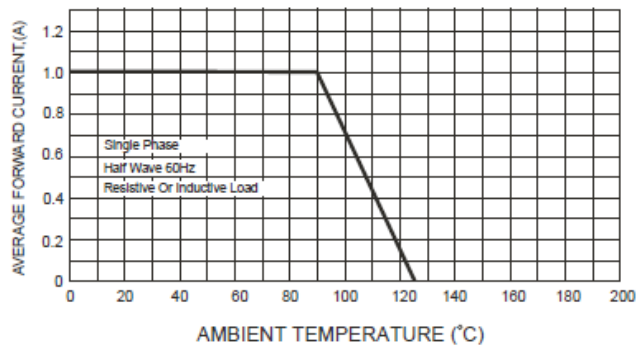


FIG.2 TYPICAL FORWARD CURRENT DERATING CURVE

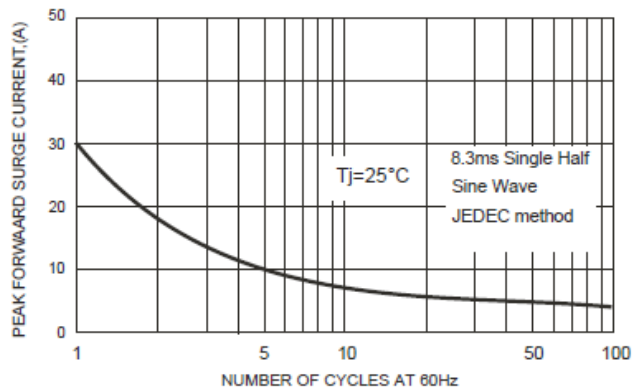


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

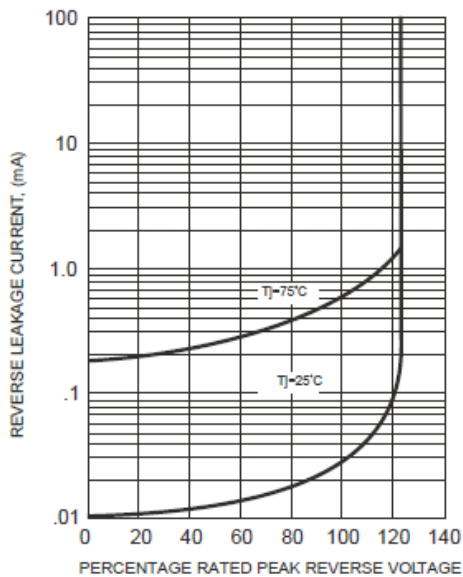


FIG.3 TYPICAL REVERSE CHARACTERISTICS

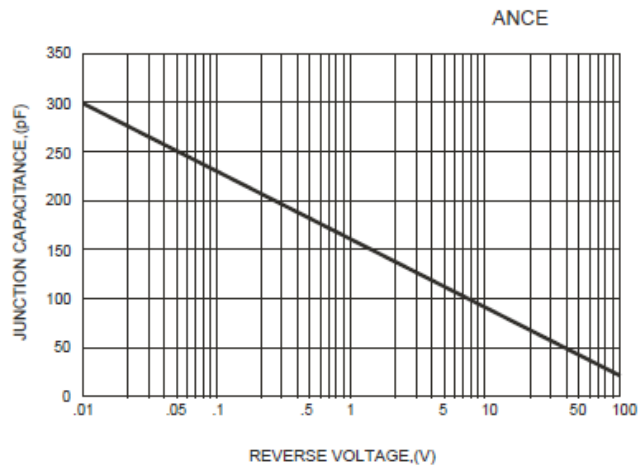
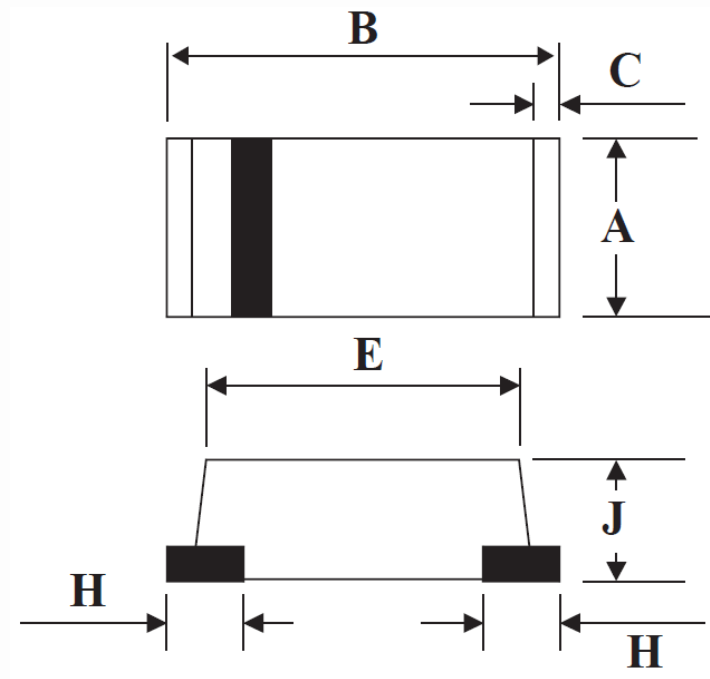


FIG.5 TYPICAL JUNCTION CAPACITANCE

Package Dimension

SMA-1







Dimensions





Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	2.20	2.80	0.086	0.110
B	4.20	4.80	0.165	0.188
C	0.30(TYP)		0.011(TYP)	
E	3.80	4.20	0.149	0.165
H	1.00(TYP)		0.039(TYP)	
J	1.40	1.80	0.055	0.070



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