GSDSL14M

Low VF Surface Mount Schottky Barrier Rectifiers

Product Description

Reverse Voltage 40V, Forward Current 1.0A

Features

- Low Surface Mounted Applications
- Metal-Semiconductor Junction with Guard ring
- Epitaxial Construction
- Very Low Forward Voltage Drop
- High Current Capability
- Plastic Material Has UL Flammability Classification 94V-0
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications
- Lead(Pb)-Free

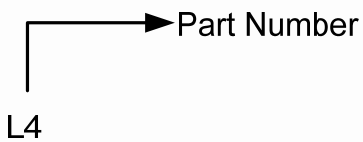
Mechanical Data

- Case : Molded Plastic, MINI-SMA(Similar to SOD-123F)
- Terminals : Solder Plated, Solderable per ML-STD-750 Method 2026
- Polarity : Indicated By Cathode Band
- Weight : 0.040 grams

Packages

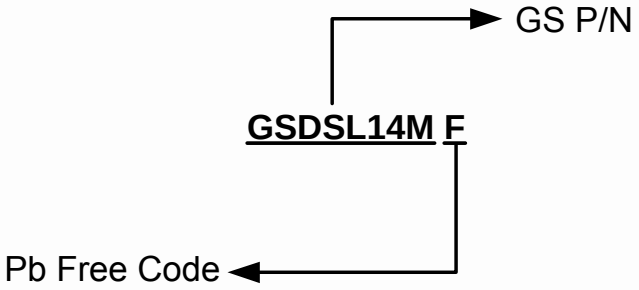
MINI-SMA
(SOD-123F)

Marking Information



Part Number	Package	Marking
GSDSL14MF	MINI-SMA (SOD-123F)	L4

Ordering Information



Part Number	Package	Quantity
GSDSL14MF	MINI-SMA (SOD-123F)	2500 PCS

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		GSDSL14M	Unit
V_{RRM}	Maximum Recurrent Peak Reverse Voltage		40	V
V_{RMS}	Maximum RMS Voltage		28	V
V_{DC}	Maximum DC Blocking Voltage		40	V
V_F	Maximum Instantaneous Forward Voltage @I_F=1.0A	T_A=25°C	0.40	V
		T_A=100°C	0.35	V
$I_{F(AV)}$	Maximum Average Forward Rectified Current @T_A=90°C		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_A=25°C	0.5	mA
		T_A=100°C	10	
C_J	Typical Junction Capacitance(Note 1)		130(TYP)	pF
$R_{\theta JC}$	Typical Thermal Resistance(Note 2)		42(TYP)	°C/W
T_J	Junction Temperature Range		-55 to +125	°C
T_{STG}	Storage Temperature Range		-55 to +150	°C

Notes: 1. Measured at 1.0MHz applied reverse voltage of 4.0V DC
2. Thermal Resistance Junction to case

Typical Characteristics

FIG.1-TYPICAL FORWARD CHARACTERISTICS

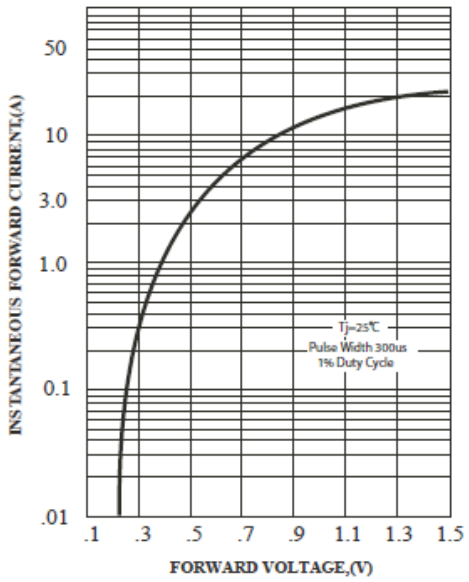


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

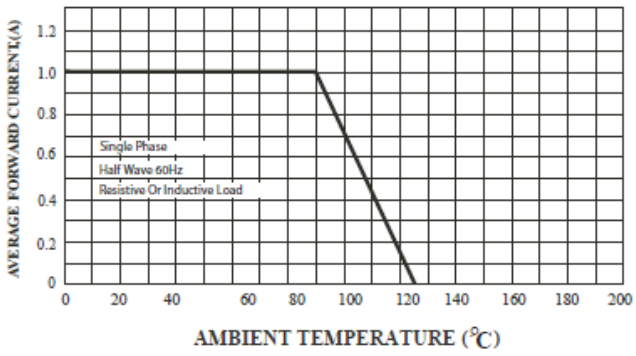


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

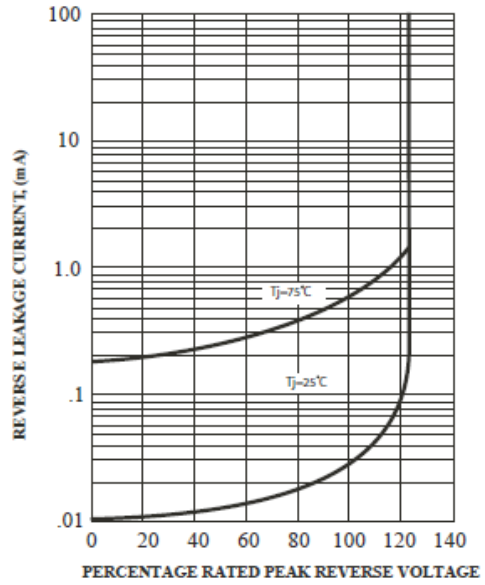


FIG.4-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

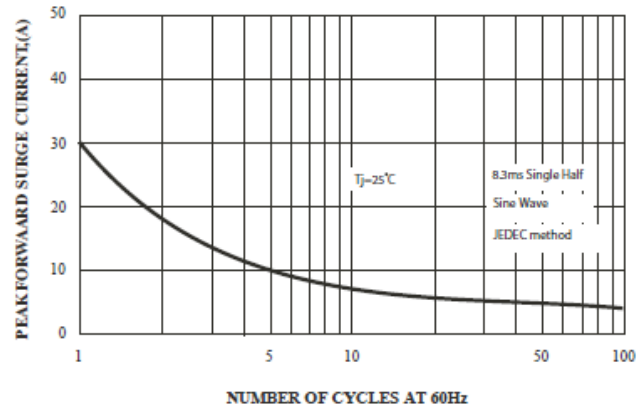
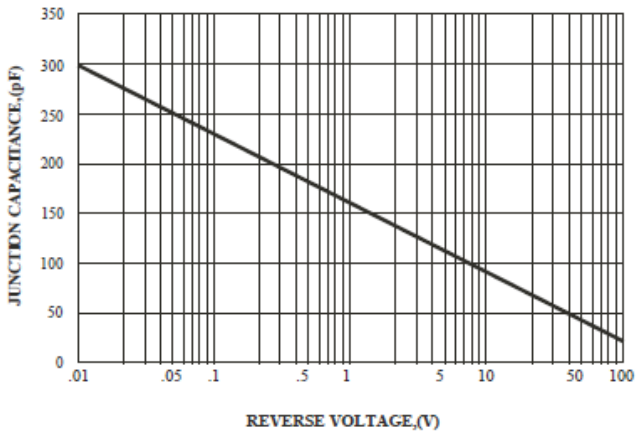
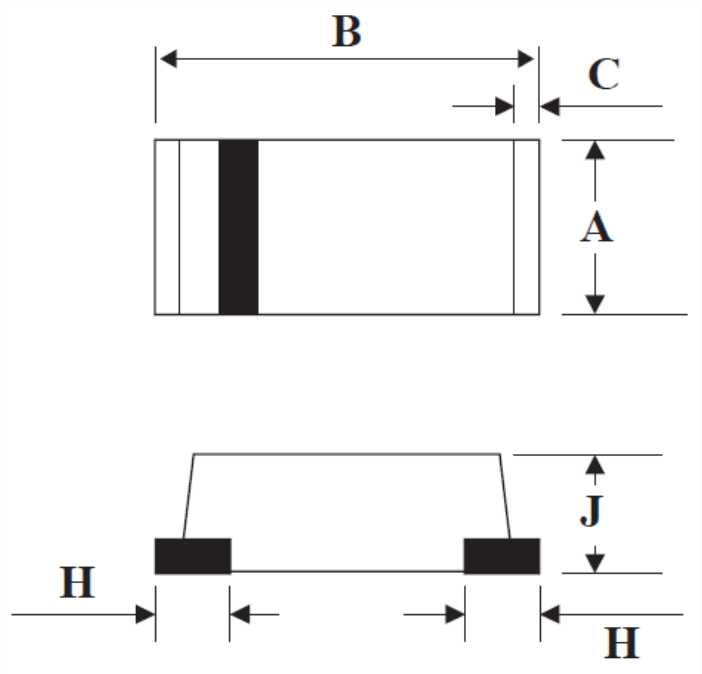


FIG.5-TYPICAL JUNCTION CAPACITANCE



Package Dimension

MINI-SMA
(SOD-123F)



Dimensions				
Symbol	Millimeters		Inches	
	Min	Max	Min	Max
A	1.40	1.80	0.055	0.070
B	3.50	3.90	0.137	0.153
C	-	0.30(TYP)	-	0.011(TYP)
H	-	0.70(TYP)	-	0.027(TYP)
J	1.30	1.70	0.051	0.066

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