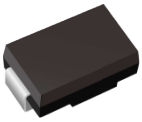
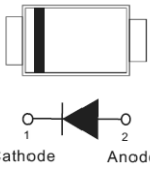
GS1MI

Surface Mount Rectifier

Voltage	1000 V	Current	1 A

SMA





Features

- For surface mounted applications in order to optimize board space
- Easy pick and place
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Low Forward Drop
- High temperature soldering : 260°C /10 seconds at terminals
- Glass Passivated Chip Junction
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SMA Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Approx. Weight : 0.0024 ounces, 0.0679 grams

Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	1000	V
Maximum RMS Voltage	V_{RMS}	700	V
Maximum DC Blocking Voltage	V_{DC}	1000	V
Maximum Average Forward Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I_{FSM}	30	A
Typical Junction Capacitance Measured at 1 MHZ And Applied V_R = 4 V	C_J	7	pF
Typical Thermal Resistance	$R_{\theta JA}$ (1) $R_{\theta JL}$ (2)	150 25	°C/W
Operating Junction Temperature Range	T_J	-55~150	°C
Storage Temperature Range	T_{STG}	-55~150	°C

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Electrical Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	I_F = 1 A, T_J = 25 °C	-	-	1.1	V
Reverse Current	I_R	V_R = 1000 V, T_J= 25 °C	-	-	1	uA
		V_R = 1000 V, T_J= 100 °C	-	1.38	-	

NOTES :

1. Mounted on a FR4 PCB, single-sided copper, standard footprint.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm^2 copper pad area.

GS1MI

TYPICAL CHARACTERISTIC CURVES

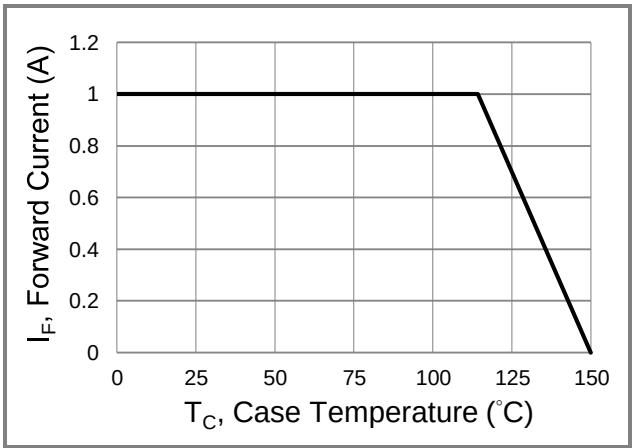


Fig.1 Forward Current Derating Curve

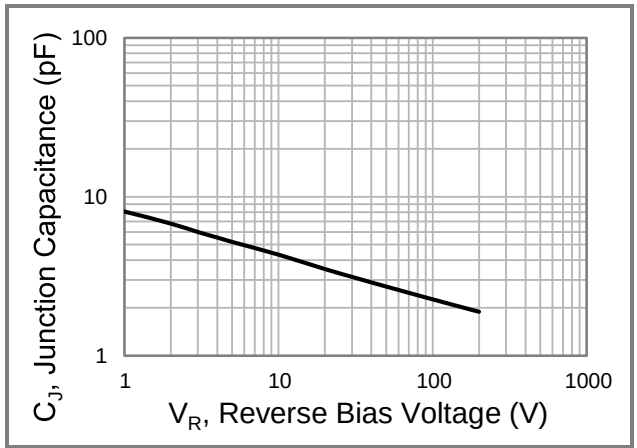


Fig.2 Typical Junction Capacitance

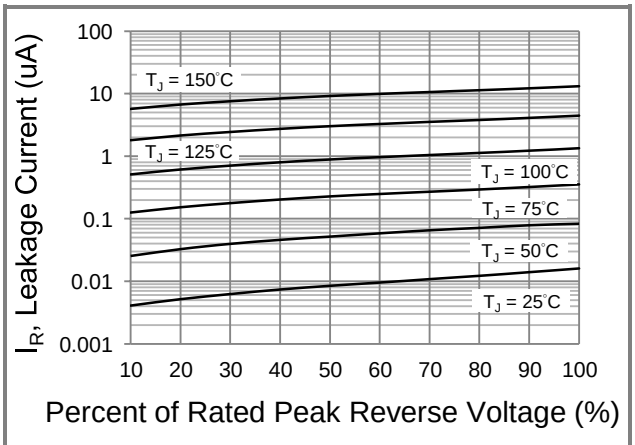


Fig.3 Typical Reverse Characteristics

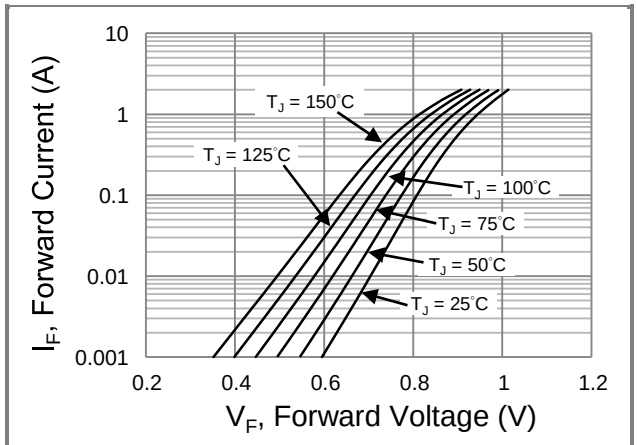


Fig.4 Typical Forward Characteristics

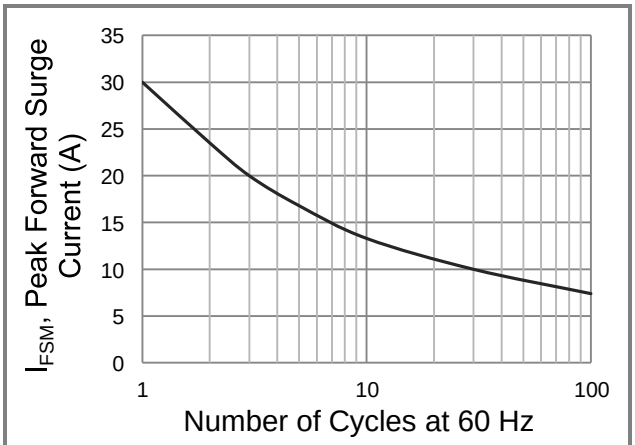


Fig.5 Maximum Forward Surge Current

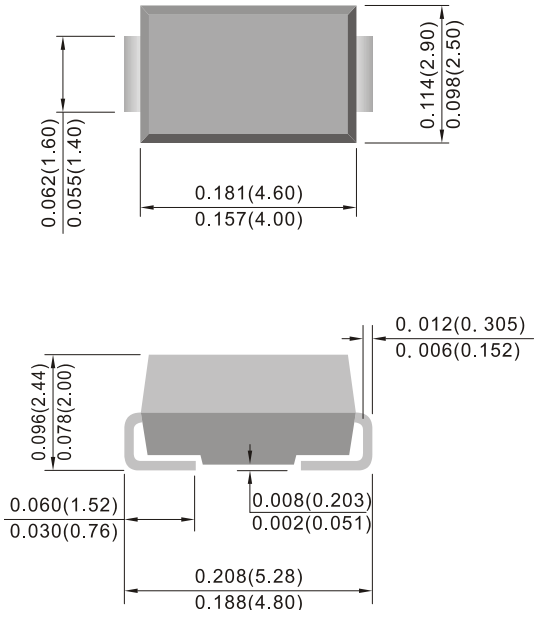
GS1MI

Part No. Packing Code Version

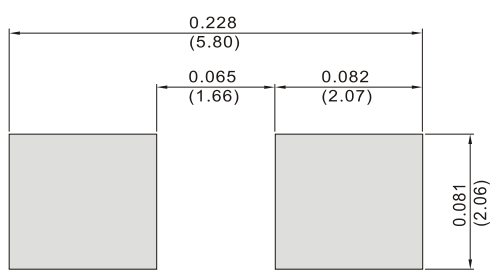
Part No. Packing Code	Package Type	Packing Type	Marking	Version
GS1MI_R1_00101	SMA	1.8K pcs / 7” reel	GS1MI	Halogen free RoHS compliant
GS1MI_R2_00101	SMA	7.5K pcs / 13” reel	GS1MI	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout

SMA Dimension — Unit: inch(mm)



SMA Pad Layout — Unit: inch(mm)



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