



GH1D-AU / GH1G-AU

SURFACE MOUNT RECTIFIER

Voltage

200~400 V

Current

1 A

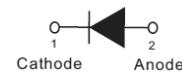
Features

- Glass passivated chip junction
- Low forward voltage drop
- Low leakage current
- Plastic package has underwriters laboratory flammability classification 94V-O
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard
- AEC-Q101 qualified

Mechanical Data

- Case: SMA Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Approx. Weight: 0.0024 ounces, 0.068 grams

SMA



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

PARAMETER	SYMBOL	GH1D-AU	GH1G-AU	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	400	V
Maximum Rms Voltage	V _{RMS}	140	280	V
Maximum Dc Blocking Voltage	V _{DC}	200	400	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}	35		A
Typical Junction Capacitance Measured at 1 MHZ And Applied V _R = 4V	C _J	8		pF
Typical Thermal Resistance	R _{θJA} ⁽¹⁾	150		°C/W
	R _{θJC} ⁽²⁾	20		
Operating Junction Temperature Range	T _J	-55~175		°C
Storage Temperature Range	T _{STG}	-55~175		°C



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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 0.5\text{A}, T_J = 25^\circ\text{C}$	-	0.89	-	V
		$I_F = 1\text{A}, T_J = 25^\circ\text{C}$	-	0.94	1.1	
		$I_F = 0.5\text{A}, T_J = 125^\circ\text{C}$	-	0.77	-	
		$I_F = 1\text{A}, T_J = 125^\circ\text{C}$	-	0.84	-	
Reverse Current	I_R	$V_R = V_{RRM}, T_J = 25^\circ\text{C}$	-	-	1	uA
		$V_R = V_{RRM}, T_J = 125^\circ\text{C}$	-	8.65	-	

NOTES:

1. Mounted on a FR4 PCB, single-sided copper, mini pad.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.



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TYPICAL CHARACTERISTIC CURVES

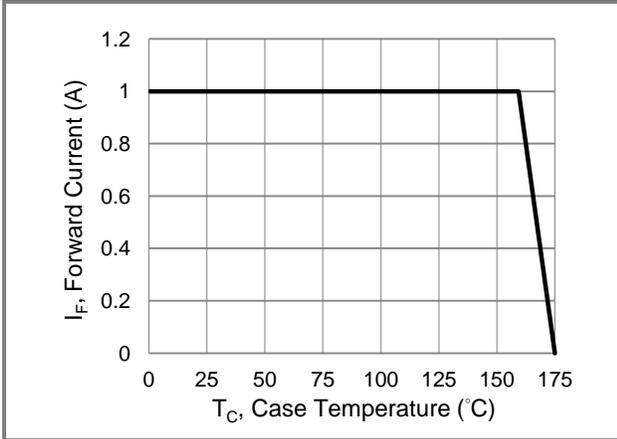


Fig.1 Forward Current Derating Curve

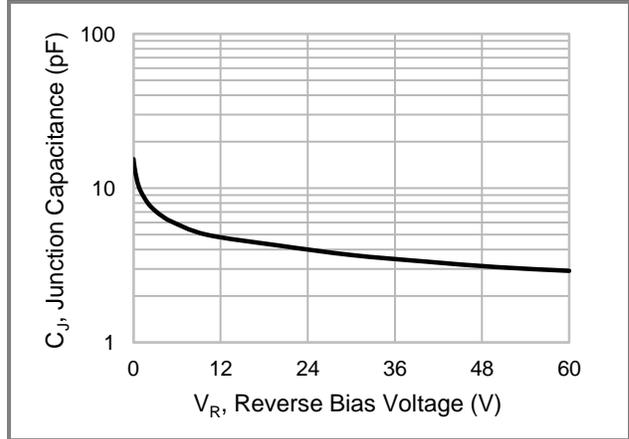


Fig.2 Typical Junction Capacitance

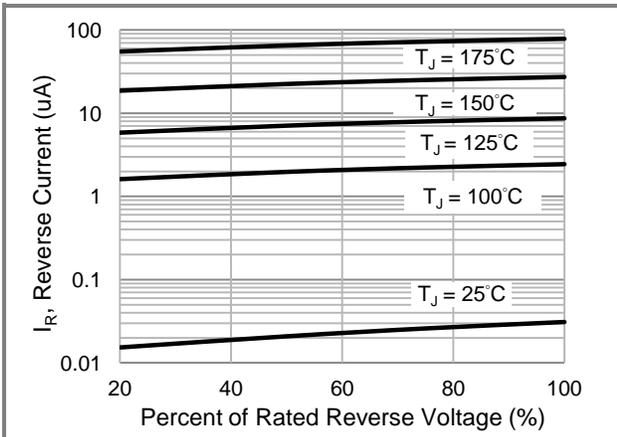


Fig.3 Typical Reverse Characteristics

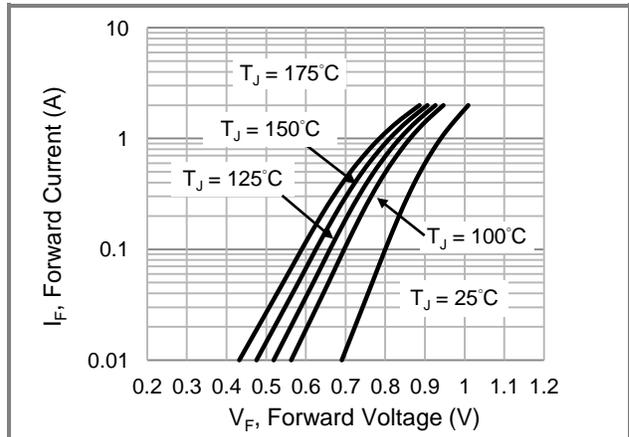


Fig.4 Typical Forward Characteristics

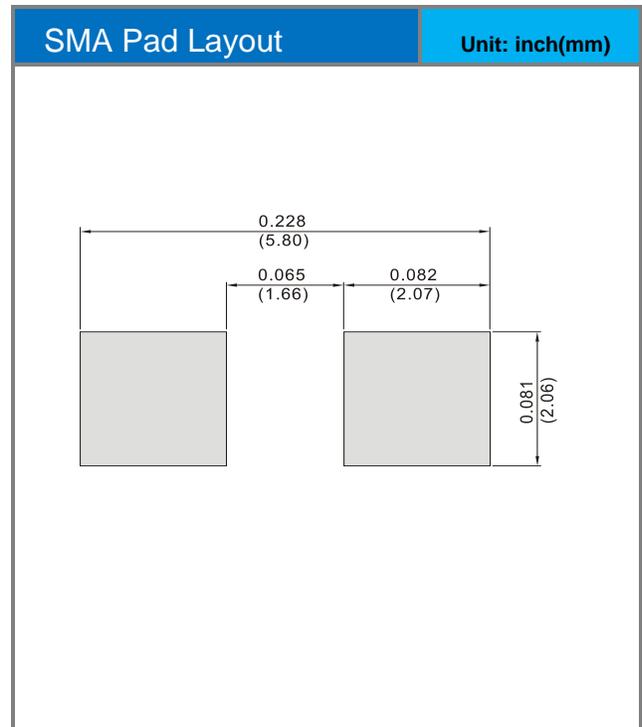
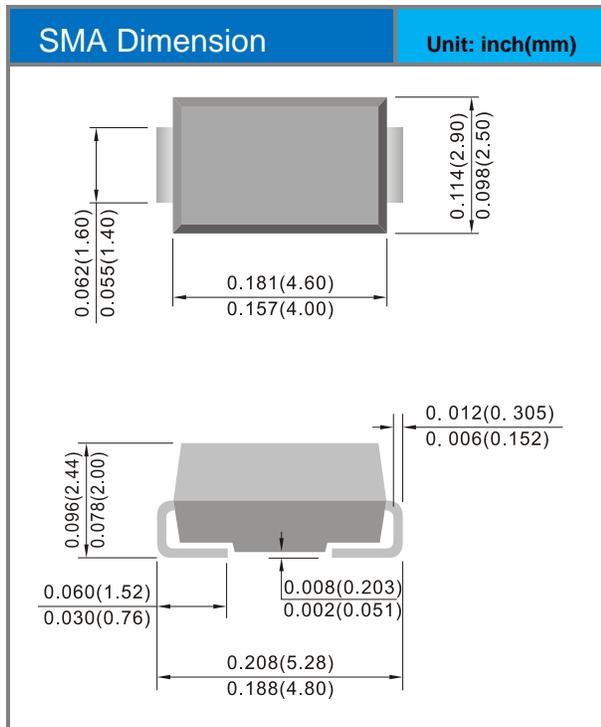


GH1D-AU / GH1G-AU

Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
GH1D-AU_R2_000A1	SMA	7.5K pcs / 13" reel	GH1D	Halogen free
GH1G-AU_R2_000A1	SMA	7.5K pcs / 13" reel	GH1G	Halogen free

Packaging Information & Mounting Pad Layout





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