



G1D~G1M

SURFACE MOUNT GENERAL PURPOSE RECTIFIERS

Voltage

200~1000 V

Current

1 A

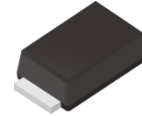
Features

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

Mechanical Data

- Case: SMAS Package
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0013 ounces, 0.0433 grams

SMAS



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

PARAMETER	SYMBOL	G1D	G1G	G1J	G1K	G1M	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	200	400	600	800	1000	V
Maximum Rms Voltage	V _{RMS}	140	280	420	560	700	V
Maximum Dc Blocking Voltage	V _{DC}	200	400	600	800	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 = 4V	C _J	7					pF
Typical Thermal Resistance	R _{θJA} ⁽¹⁾	150					°C/W
	R _{θJC} ⁽²⁾	20					
Operating Junction Temperature Range	T _J	-55~150					°C
Storage Temperature Range	T _{STG}	-55~150					°C



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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 0.5\text{A}, T_J = 25^\circ\text{C}$	-	0.90	-	V
		$I_F = 1\text{A}, T_J = 25^\circ\text{C}$	-	0.96	1.1	
		$I_F = 0.5\text{A}, T_J = 125^\circ\text{C}$	-	0.78	-	
		$I_F = 1\text{A}, T_J = 125^\circ\text{C}$	-	0.85	-	
Reverse Current	I_R	$V_R = V_{RRM}, T_J = 25^\circ\text{C}$	-	-	1	uA
		$V_R = V_{RRM}, T_J = 125^\circ\text{C}$	-	9.36	-	

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

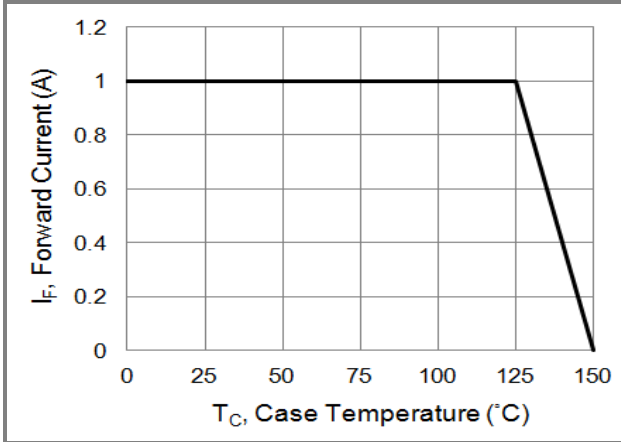


Fig.1 Forward Current Derating Curve

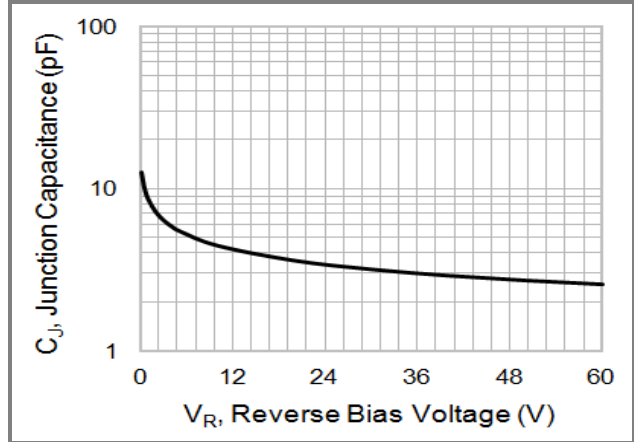


Fig.2 Typical Junction Capacitance

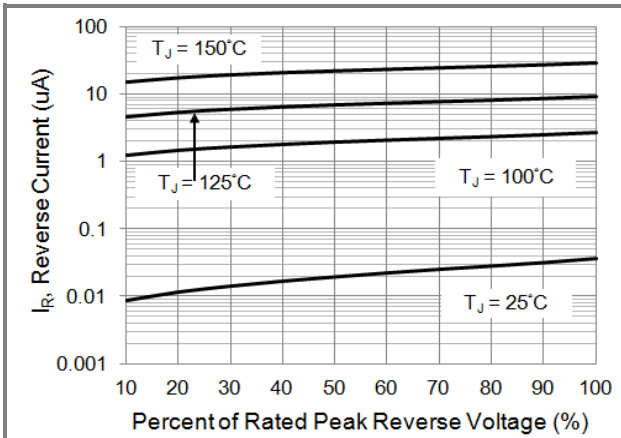


Fig.3 Typical Reverse Characteristics

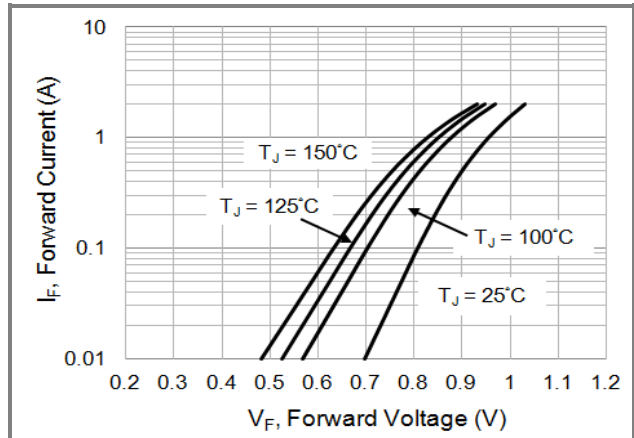


Fig.4 Typical Forward Characteristics

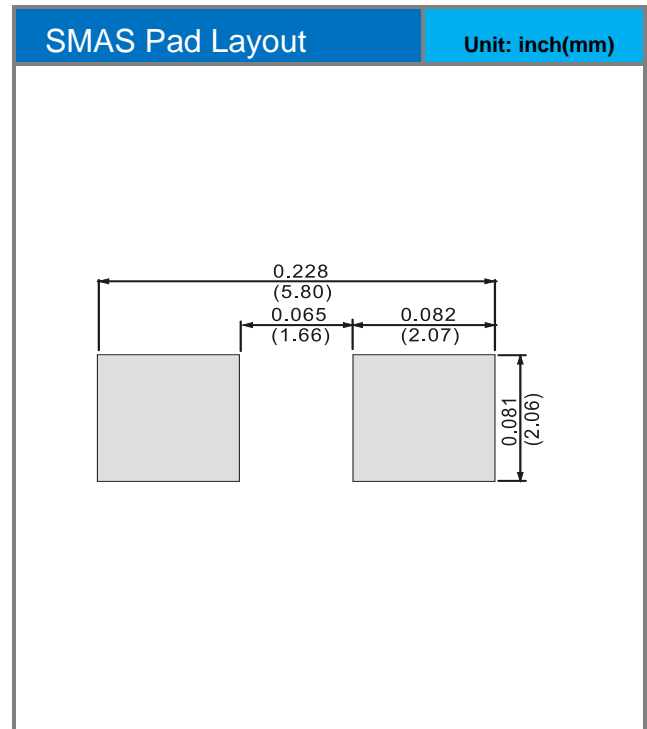
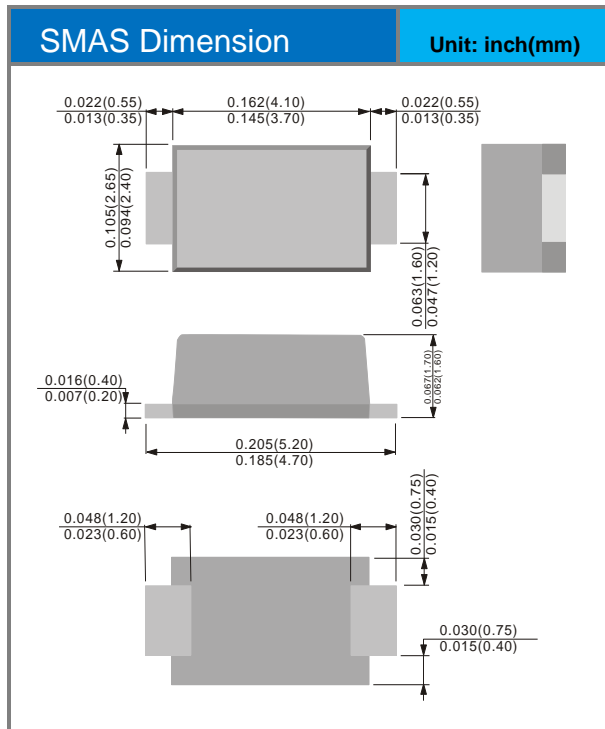


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Part No Packing Code Version

Part No Packing Code	Package Type	Packing Type	Marking	Version
G1D_R2_00001	SMAS	9.5K / 13" Reel	G1D	Halogen free
G1G_R2_00001	SMAS	9.5K / 13" Reel	G1G	Halogen free
G1J_R2_00001	SMAS	9.5K / 13" Reel	G1J	Halogen free
G1K_R2_00001	SMAS	9.5K / 13" Reel	G1K	Halogen free
G1M_R2_00001	SMAS	9.5K / 13" Reel	G1M	Halogen free

Packaging Information & Mounting Pad Layout





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