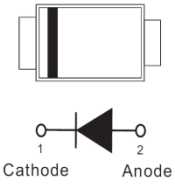
GS1GAL-AU ~ GS1MAL-AU Series

Surface Mount General Purpose Rectifiers

Voltage	400~1000 V	Current	1 A

SOD-123FL



Features

- For surface mounted applications in order to optimize board space
- Ideal for automated placement
- High temperature soldering guaranteed: 260ºC/10 seconds at terminals
- Low profile package
- Glass passivated junction
- AEC-Q101 qualified
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0173 grams

Maximum Ratings and Thermal Characteristics (TA = 25ºC unless otherwise noted)

PARAMETER		SYMBOL	GS1GAL-AU	GS1JAL-AU	GS1KAL-AU	GS1MAL-AU	UNIT
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	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	(Note 1)	$R_{\theta JA}$	210				ºC/W
	(Note 2)	$R_{\theta JC}$	37				
	(Note 2)	$R_{\theta JL}$	32				
Operating Junction Temperature Range		T_J	-55~150				ºC
Storage Temperature Range		T_{STG}	-55~150				ºC

GS1GAL-AU ~ GS1MAL-AU Series

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

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Forward Voltage	V_F	I_F = 1A, T_J = 25 °C	-	-	1.1	V
Reverse Current	I_R	$V_R = V_{RRM}$, T_J = 25 °C	-	-	1	uA
		$V_R = V_{RRM}$, T_J = 125 °C	-	-	50	

NOTES :

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

GS1GAL-AU ~ GS1MAL-AU Series

TYPICAL CHARACTERISTIC CURVES

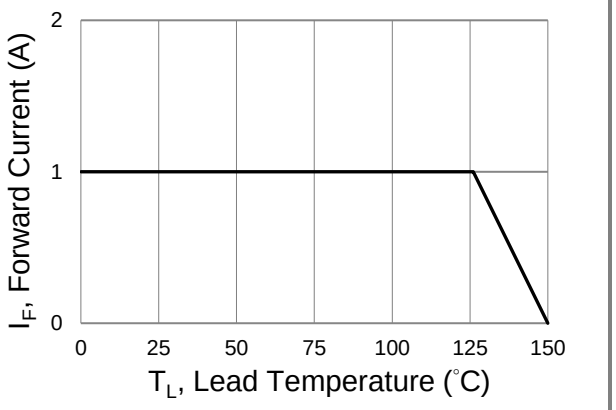


Fig.1 Forward Current Derating Curve

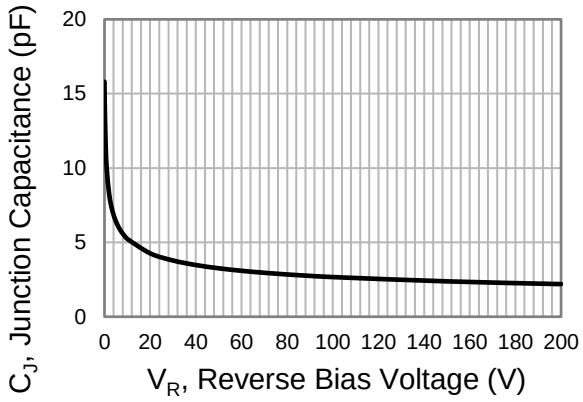


Fig.2 Typical Junction Capacitance

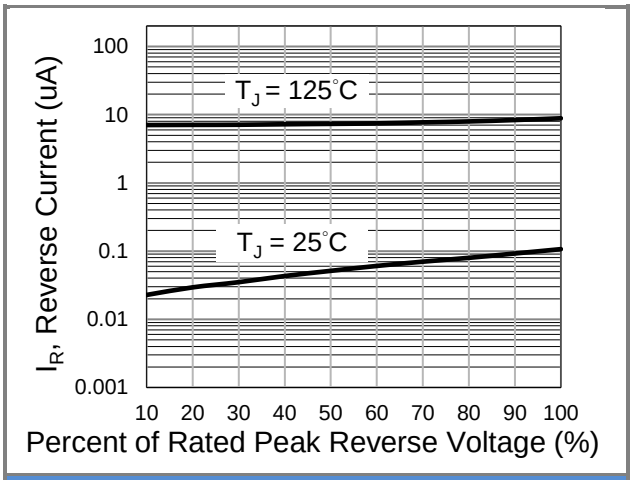


Fig.3 Typical Reverse Characteristics

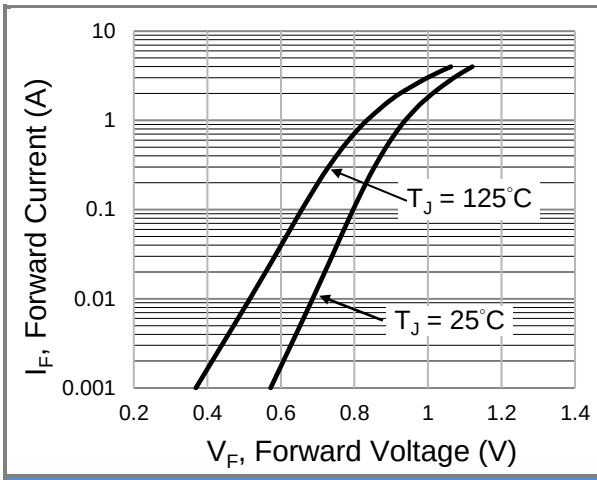


Fig.4 Typical Forward Characteristics

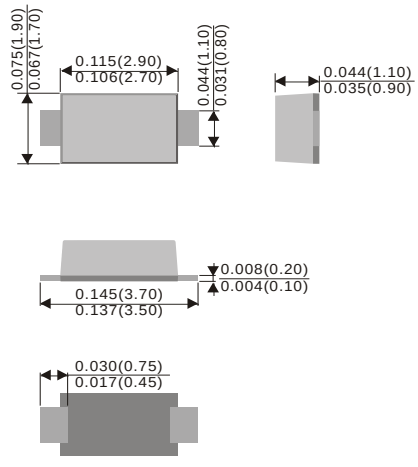
GS1GAL-AU ~ GS1MAL-AU Series

Product and Packing Information

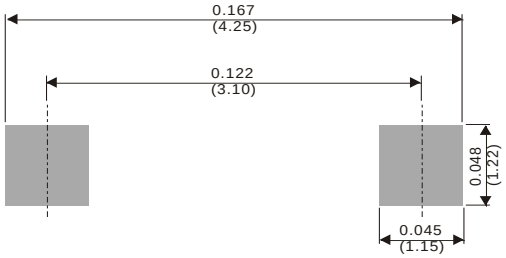
Part No.	Package Type	Packing Type	Marking
GS1GAL-AU	SOD-123FL	3K pcs / 7" reel	1GL
GS1JAL-AU	SOD-123FL	3K pcs / 7" reel	1JL
GS1KAL-AU	SOD-123FL	3K pcs / 7" reel	1KL
GS1MAL-AU	SOD-123FL	3K pcs / 7" reel	1ML

Packaging Information & Mounting Pad Layout

SOD-123FL Dimension — Unit: inch(mm)



SOD-123FL Pad Layout — Unit: inch(mm)



GS1GAL-AU ~ GS1MAL-AU Series

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