



GS1000FL THRU GS1010FL

1.0A General Purpose Rectifier

Features

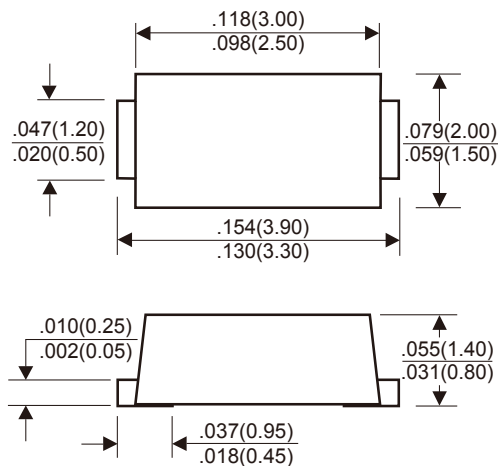
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Low forward voltage drop
- ★ Low leakage current
- ★ High forward surge capability

Mechanical Data

- ★ Case: Molded plastic, SOD-123FL
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750, method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

Voltage Range 50 to 1000 V
Current 1.0 Ampere

SOD-123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	GS 1000FL	GS 1001FL	GS 1002FL	GS 1004FL	GS 1006FL	GS 1008FL	GS 1010FL	UNIT
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current @ T _L =75°C	I _{F(AV)}	1.0							A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I _{FSM}	30							A
Maximum instantaneous forward voltage @ I _F =1.0A	V _F	1.1							V
Maximum DC reverse current at rated DC blocking voltage @ T _A =25°C @ T _A =125°C	I _R	1 50							μA
Typical junction capacitance (Note 1)	C _J	7							pF
Typical thermal resistance from junction to ambient (Note 2)	R _{θJA}	56							°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-55 to +150							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts DC.

(2) Mounted on FR-4 substrate, 1.0" x 1.0", 2oz, single-sided, PC boards with 0.2" x 0.25" copper pad.

RATINGS AND CHARACTERISTICS CURVES GS1000FL THRU GS1010FL

Fig.1 - Forward Current Derating Curve

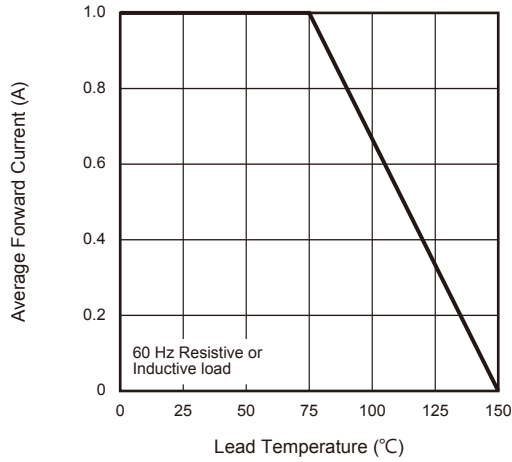


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

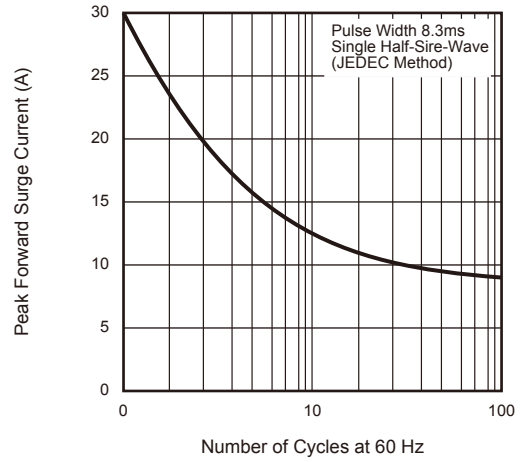


Fig.3 - Typical Instantaneous Forward Characteristics

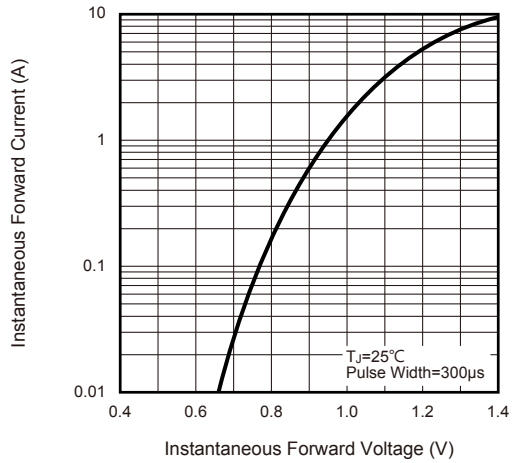


Fig.4 - Typical Reverse Leakage Characteristics

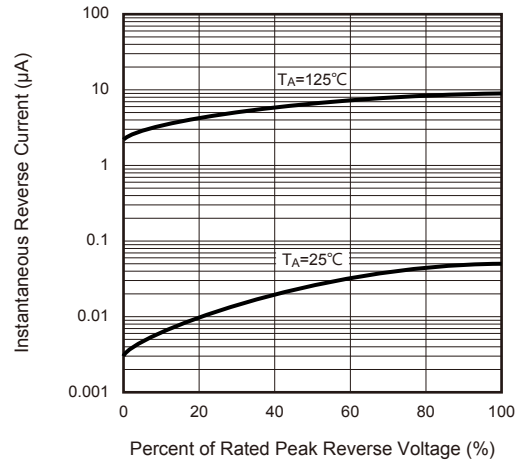


Fig.5 - Typical Junction Capacitance

