YENYO

GS1000FL-A THRU GS1010FL-A

Surface Mount Standard Rectifier

Voltage Range 50 to 1000 V
Current 1.0 Ampere

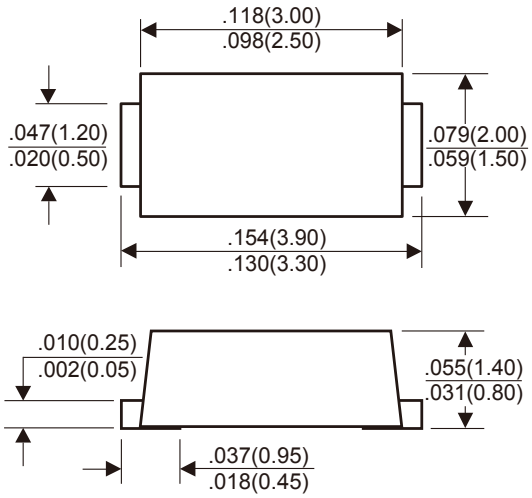
Features

- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ Low reverse leakage current
- ✶ High surge current capability
- ✶ AEC-Q101 qualified

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

SOD-123FL



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	GS10 00FL-A	GS10 01FL-A	GS10 02FL-A	GS10 04FL-A	GS10 06FL-A	GS10 08FL-A	GS10 10FL-A	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℃	$I_{F(AV)}$	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 @T_A=25℃ at rated DC blocking voltage @T_A=125℃	I_R	1 50							μA
Typical junction capacitance (Note 1)	C_J	7							pF
Typical thermal resistance from junction to ambient (Note 2)	$R_{\theta JA}$	56							℃/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							℃

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-A THRU GS1010FL-A

Fig.1 - Forward Current Derating Curve

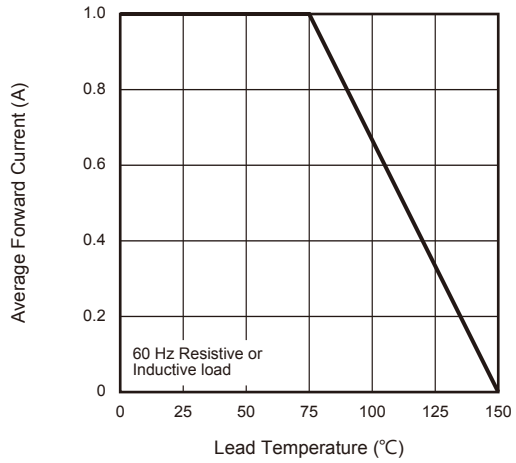


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

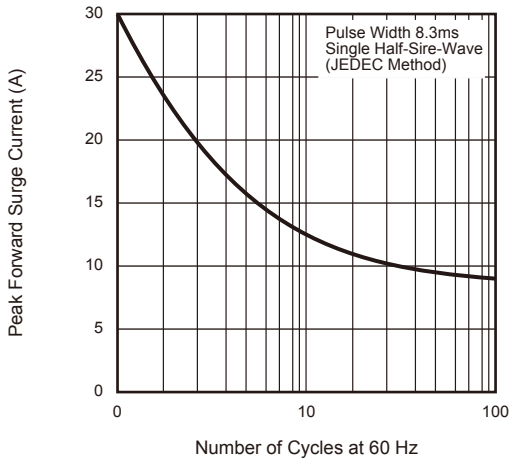


Fig.3 - Typical Instantaneous Forward Characteristics

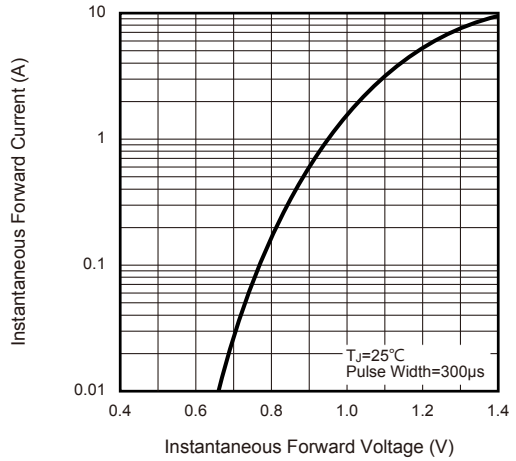


Fig.4 - Typical Reverse Leakage Characteristics

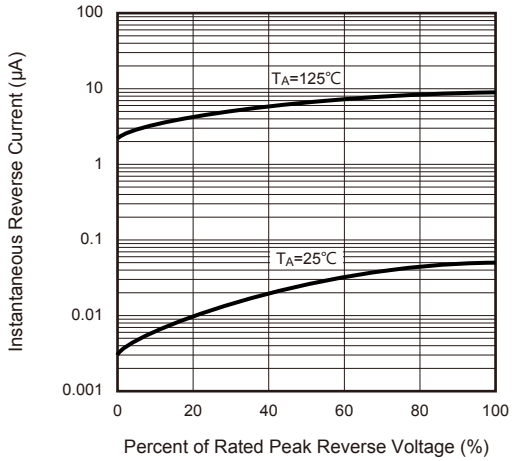


Fig.5 - Typical Junction Capacitance