SAMYANG ELECTRONICS

GS1000FL --- GS1010FL

PLASTIC SILICON RECTIFIER

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 1.0 A

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Juntion
- Ideal for automated placement
- Lead free in comply with EU RoHS 2011/65/EU directives

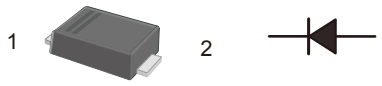
MECHANICAL DATA

- Case: SOD-123FL
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight:15mg 0.00048oz

SOD-123FL

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Top View
Marking Code : A1-A7
Simplified outline SOD-123FL and symbol

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20 %.

Parameter	Symbols	GS1000FL	GS1001FL	GS1002FL	GS1004FL	GS1006FL	GS1008FL	GS1010FL	Units
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 at Ta = 65 °C	$I_{F(AV)}$	1							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	25							A
Maximum Instantaneous Forward Voltage at 1 A	V_F	1.1							V
Maximum DC Reverse Current Ta = 25 °C at Rated DC Blocking Voltage Ta =125 °C	I_R	5 50							μA
Typical Junction Capacitance 1)	C_j	4							pF
Typical Thermal Resistance 2)	$R_{\theta JA}$	180							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

NOTE: 1) Measured at 1 MHz and applied reverse voltage of 4 V D.C
2) Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

Fig.1 Forward Current Derating Curve

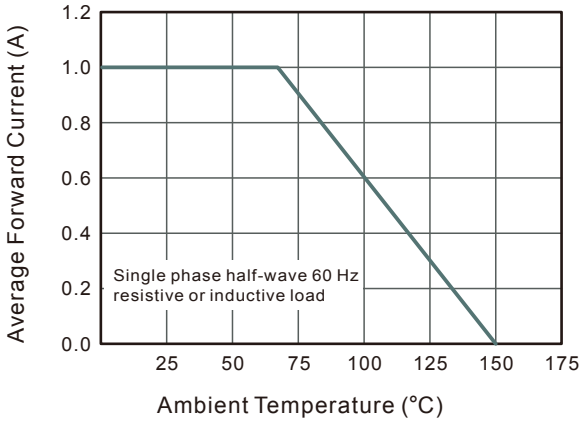


Fig.2 Typical Instaneous Reverse Characteristics

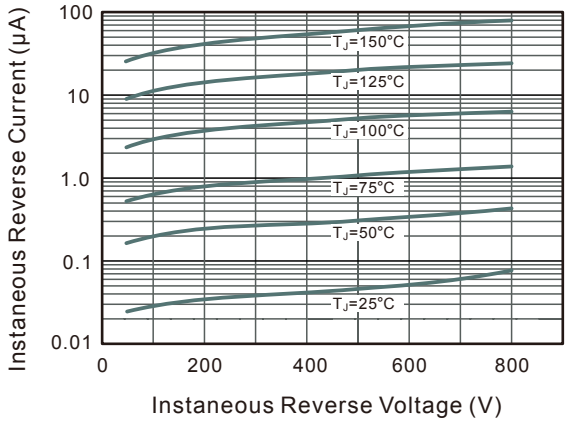


Fig.3 Typical Forward Characteristic

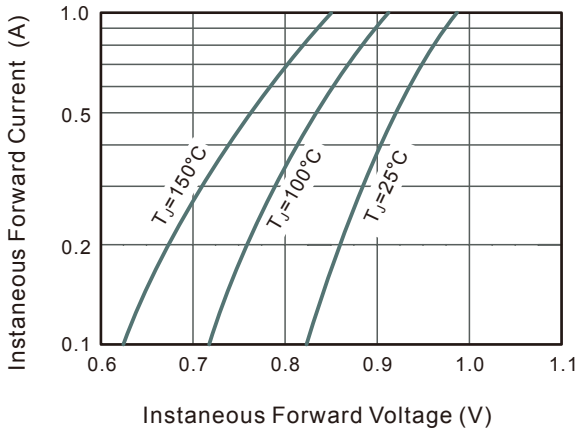
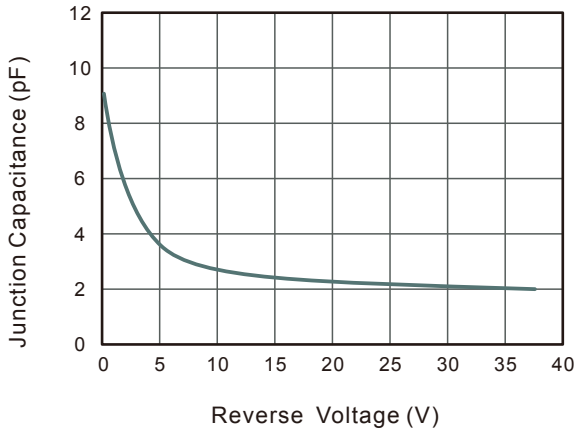
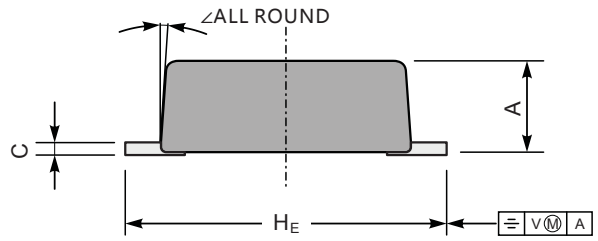


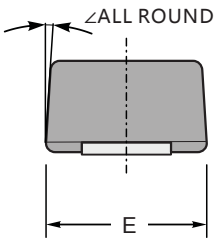
Fig.4 Typical Junction Capacitance

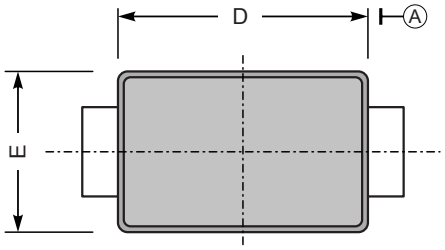


Plastic surface mounted package; 2 leads

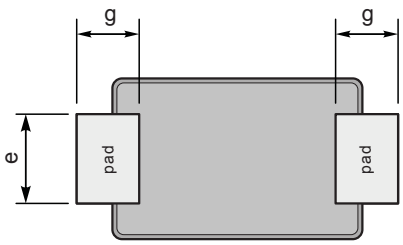
SOD-123FL







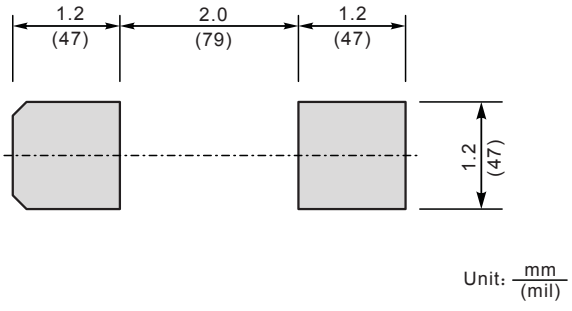
Top View



Bottom View

UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	2.9	1.9	1.1	0.9	3.8	7°
	min	0.9	0.12	2.6	1.7	0.8	0.7	3.5	
mil	max	43	7.9	114	75	43	35	150	
	min	35	4.7	102	67	31	28	138	

The recommended mounting pad size



Marking

Type number	Marking code
GS1000FL	A1
GS1001FL	A2
GS1002FL	A3
GS1004FL	A4
GS1006FL	A5
GS1008FL	A6
GS1010FL	A7