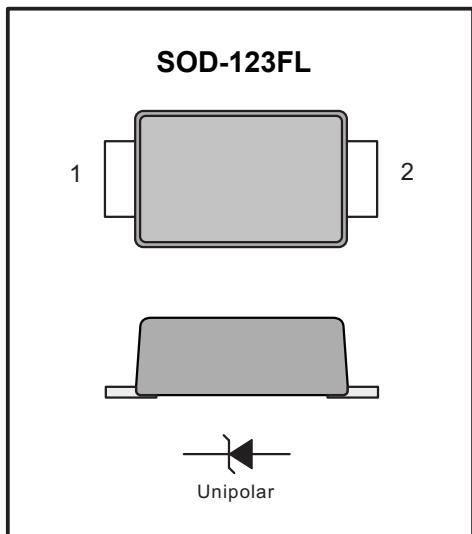


SURFACE MOUNT GENERAL RECTIFIER

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Features

- ◆ Glass passivated device
- ◆ Ideal for surface mounted applications
- ◆ Low reverse leakage
- ◆ Metallurgically bonded construction
- ◆ High temperature soldering guaranteed:
- ◆ 250°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

- ◆ Case: JEDEC UOD-123FL molded plastic body
- ◆ Terminals: Solderable per MIL-STD-750, Method 2026A
- ◆ Polarity: Polarity symbol marking on body
- ◆ Mounting Position: Any
- ◆ Weight : 0.007 ounce, 0.02 grams

Maximum Ratings And Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	UNITS
Marking Code		A1	A2	A3	A4	A5	A6	A7	
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 TL(see fig.1)	I _(AV)					1.0			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}					25			A
Maximum instantaneous forward voltage at 1.0A	V _F				1.1				V
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=125°C	I _R				10	50			uA
Typical junction capacitance (NOTE 1)	C _J				4				pF
Typical thermal resistance (NOTE 2)	R _{θJA}				180.0				°C/W
Operating junction temperature range	T _J				-55 to +125				°C
Storage temperature range	T _{STG}				-55 to +150				°C

Note: 1.Averaged over any 20ms period.

2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

3.Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length,P.C.B. mounted

Fig.1 Forward Current Derating Curve

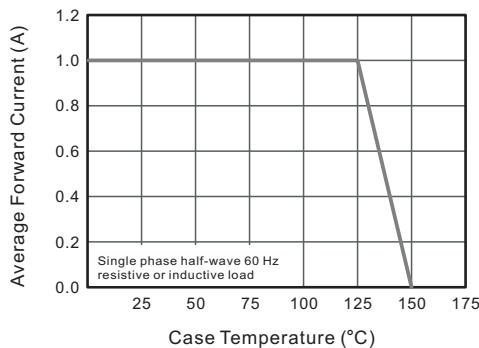


Fig.2 Typical Instantaneous Reverse Characteristics

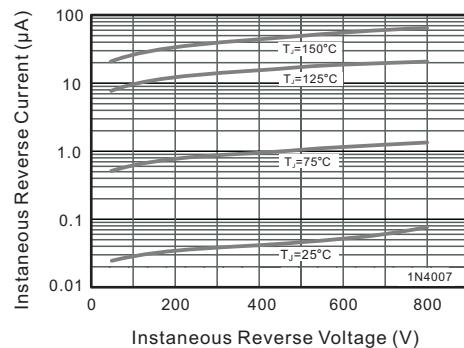


Fig.3 Typical Forward Characteristic

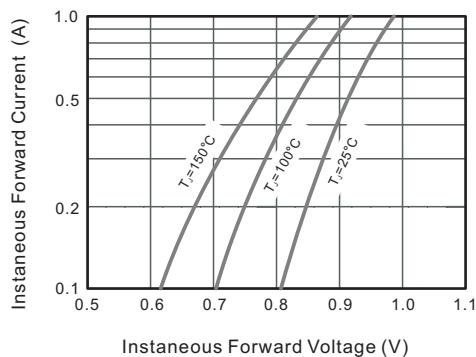


Fig.4 Typical Junction Capacitance

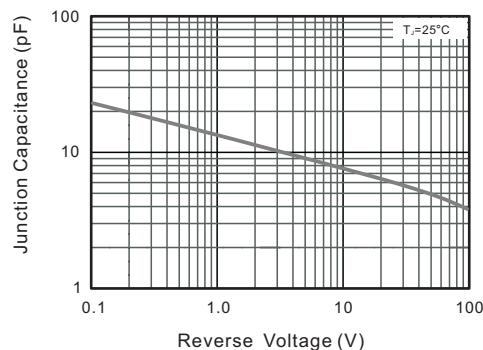
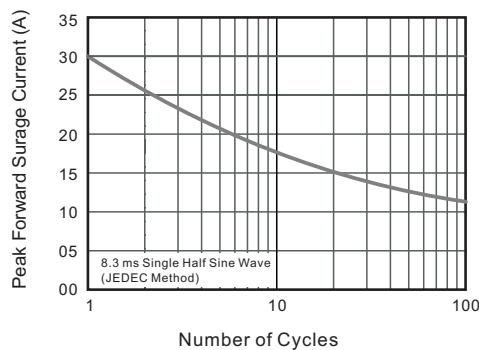


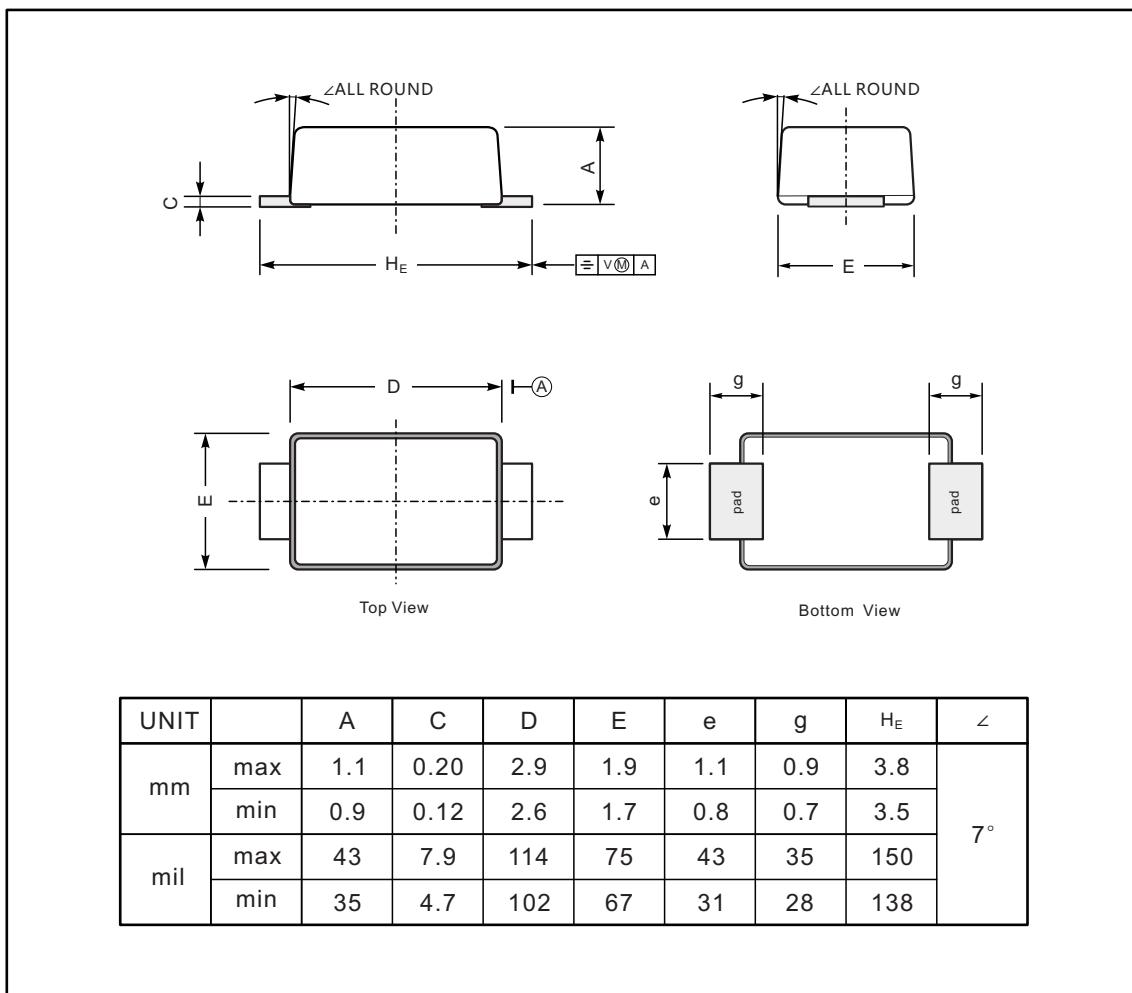
Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123FL



The recommended mounting pad size

