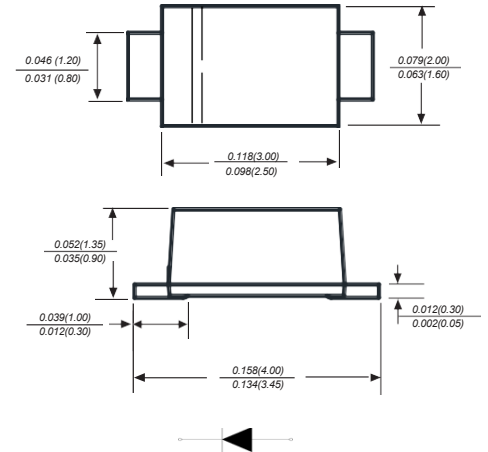


SURFACE MOUNT FAST RECOVERY RECTIFIER

Features

- ◆ Glass passivated device
- ◆ Ideal for surface mouted 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

SOD-123FL



Dimensions in inches and (millimeters)

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	RS2AW	RS2BW	RS2DW	RS2GW	RS2JW	RS2KW	RS2MW	UNITS
Marking Code		2F1	2F2	2F3	2F4	2F5	2F6	2F7	
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)	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							A
Maximum instantaneous forward voltage at 2.0A	V _F	1.3							V
Maximum DC reverse current TA=25℃ at rated DC blocking voltage TA=125℃	I _R	5 100							mA
Typical junction capacitance (NOTE 1)	C _J	40							pF
Maximum Reverse Recovery Time	t _{rr}	150				250	500		ns
Typical thermal resistance (NOTE 2)	R _{θJA} R _{θJC}	75 22							℃/W
Operating junction temperature range	T _J	-55 to +150							℃
Storage temperature range	T _{STG}	-55 to +150							℃

Note:

2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.
3. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
4. P.C.B. mounted with 2.0x2.0"(5.0x5.0cm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

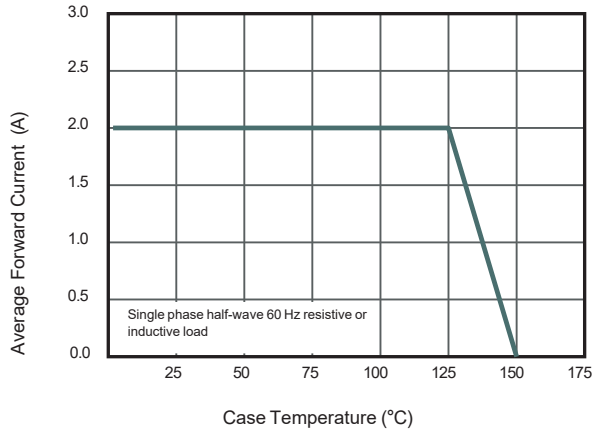


Fig.2 Typical Reverse Characteristics

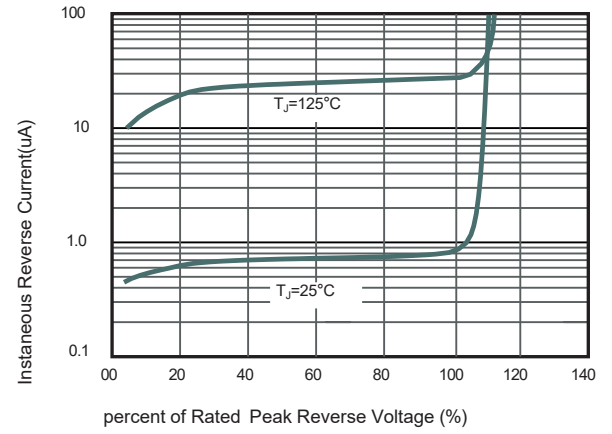


Fig.3 Typical Instantaneous Forward Characteristics

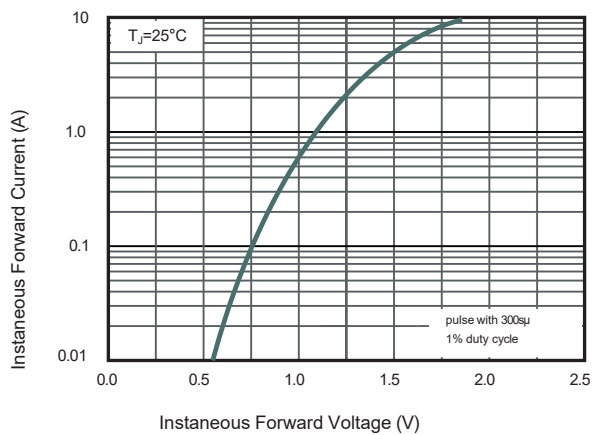


Fig.4 Typical Junction Capacitance

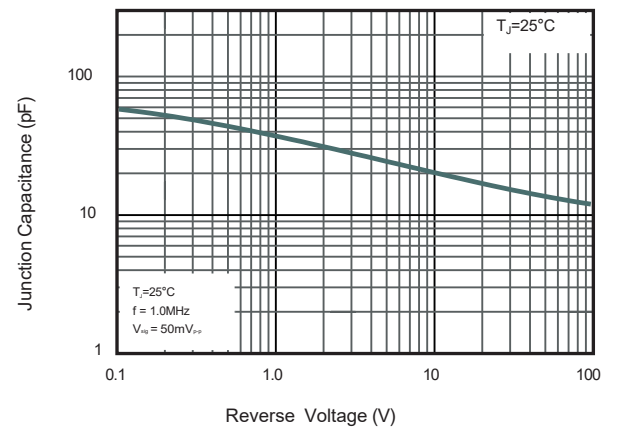
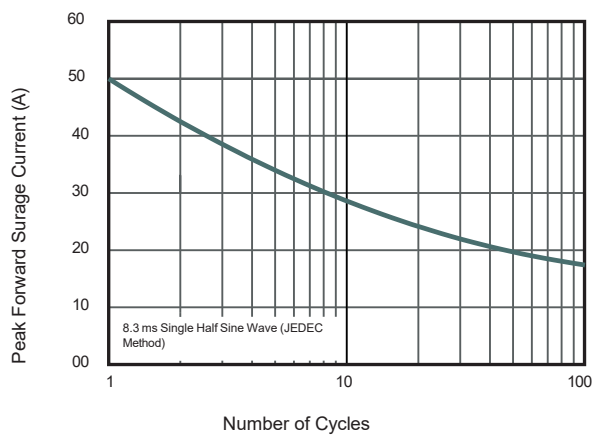


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.