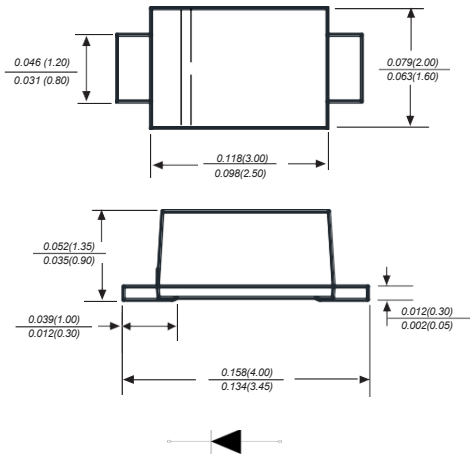
SURFACE MOUNT FAST RECOVERY RECTIFIER

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 / Marking Code	SYMBOLS	RS2AW / 2F1	RS2BW / 2F2	RS2DW / 2F3	RS2GW / 2F4	RS2JW / 2F5	RS2KW / 2F6	RS2MW / 2F7	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 TL(see fig.1)	$I_{(AV)}$	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated 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 DCblocking 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)	$R_{\theta JA}$ $R_{\theta JC}$	75 22							℃/W
Operating junction temperature range	T_J	-55 to +150							℃
Storage temperature range	T_{STG}	-55 to +150							℃

Note:
2. Measured with IF=0.5A, IR=1A, Irr=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 Characterisitics

Fig.1 Forward Current Derating Curve

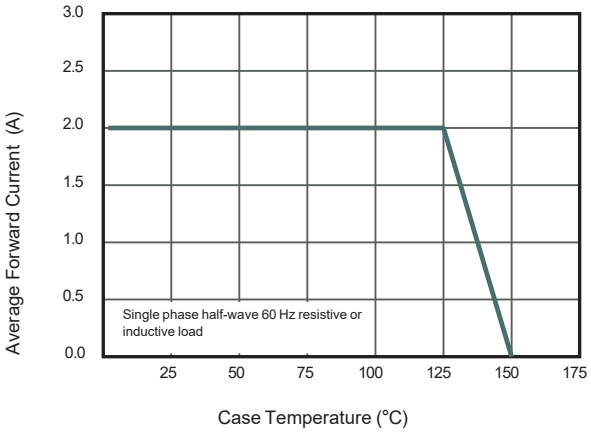


Fig.2 Typical Reverse Characteristics

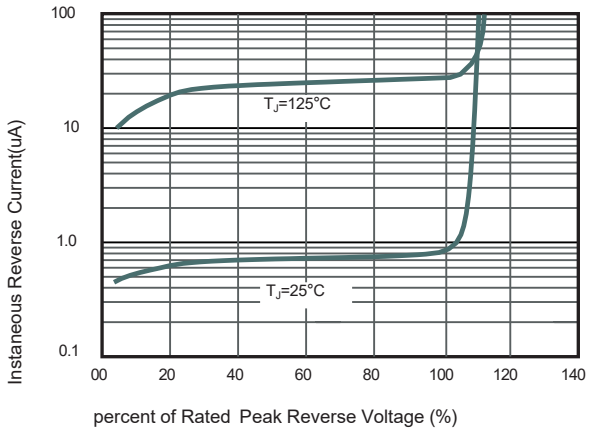


Fig.3 Typical Instaneous Forward Characteristics

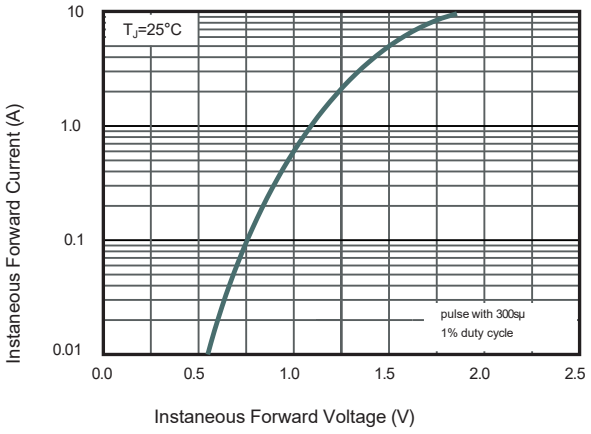


Fig.4 Typical Junction Capacitance

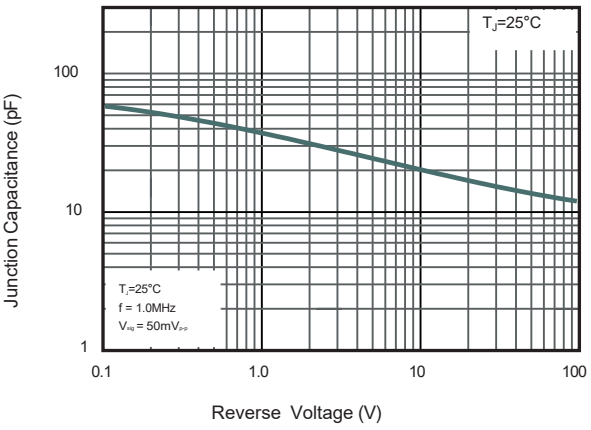
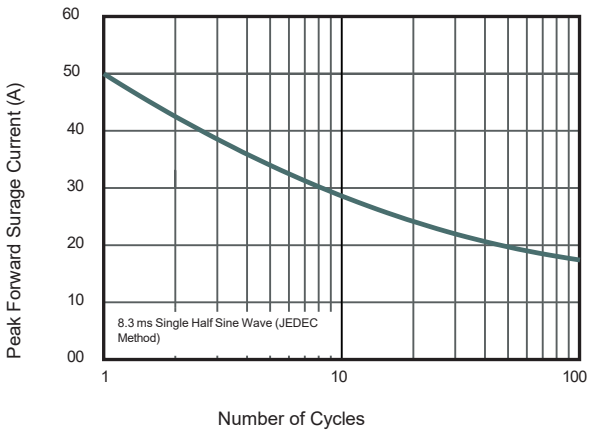


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current



The curve above is for reference only.