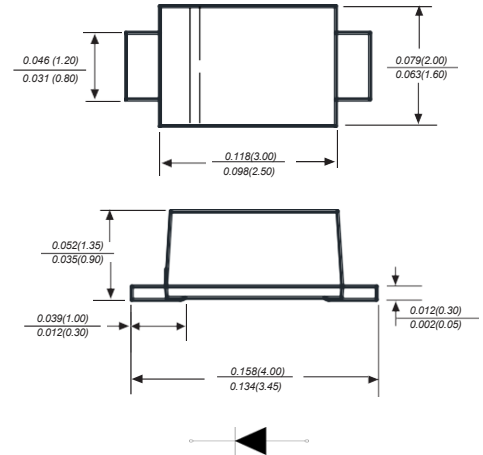


SURFACE MOUNT HIGH EFFICIENCY RECTIFIER

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	SOD1H1	SOD1H2	SOD1H3	SOD1H4	SOD1H5	SOD1H6	SOD1H7	SOD1H8	UNITS
Marking Code		U1	U2	U3	U4	U5	U6	U7	U8	
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	600	800	1000	V
Maximum average forward rectified current at TL=65°C	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	1.0			1.30		1.70			V
Maximum DC reverse current at rated DC blocking voltage	I _R	5.0 100.0								μA
Maximum reverse recovery time (NOTE 1)	t _{rr}	50					75			ns
Typical junction capacitance (NOTE 2)	C _J	15.0								pF
Typical thermal resistance	R _{θJA}	85								°C/W
Operating junction and storage temperature range	T _J ,T _{STG}	- 5 5 t o + 1 5 0								°C

Note: 1.Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$.

Ratings And Characteristic Curves

FIG. 1- FORWARD CURRENT DERATING CURVE

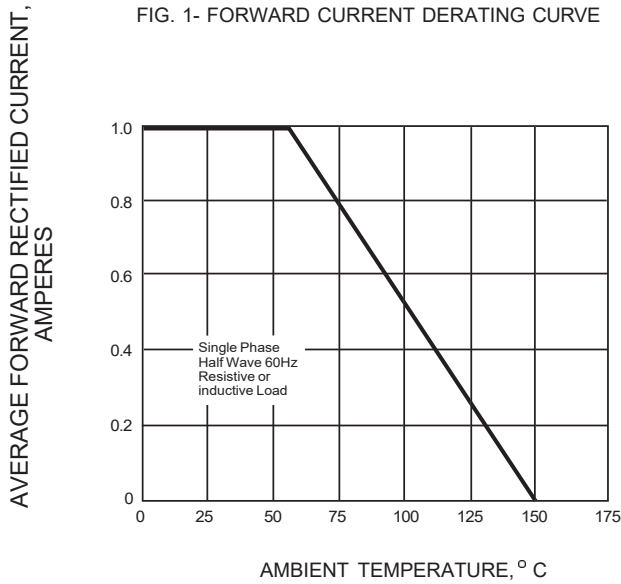


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

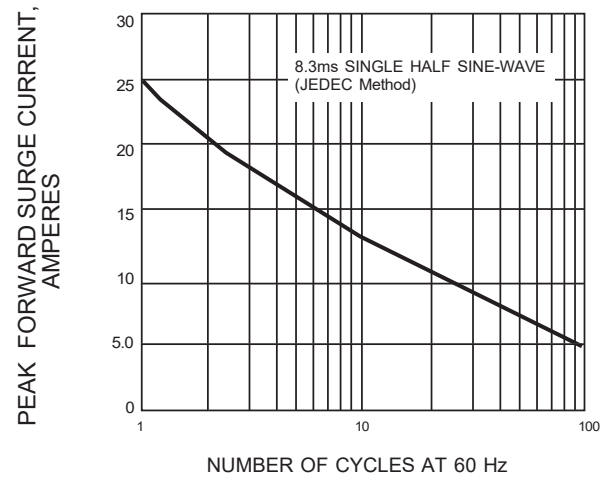


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

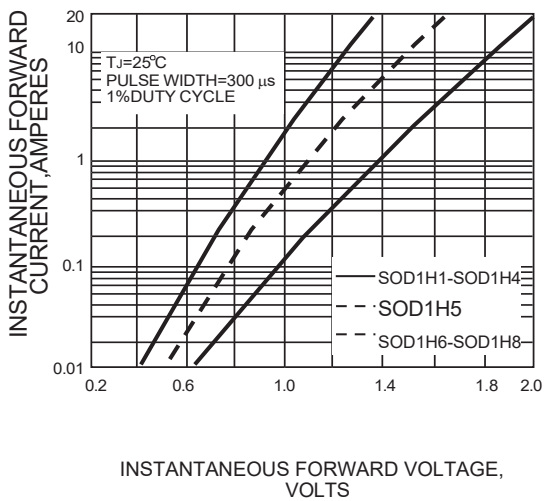
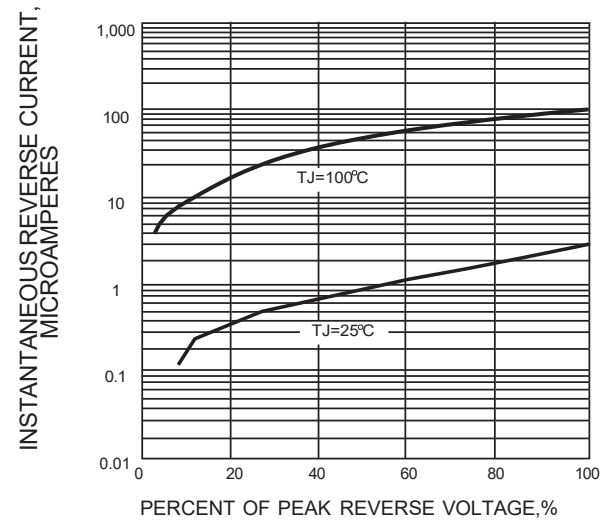


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



The curve above is for reference only.