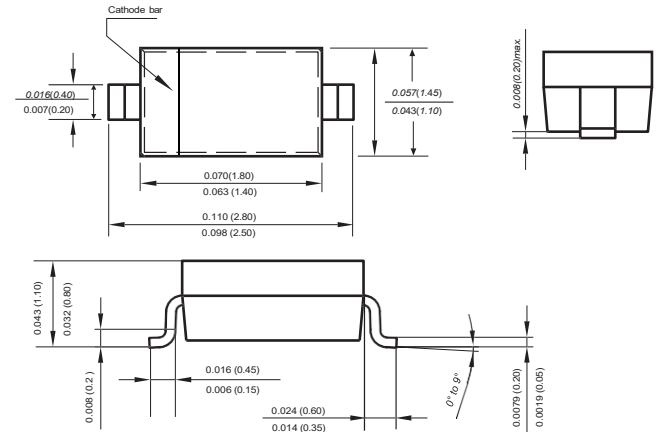


SURFACE MOUNT GLASS PASSIVATED FAST RECOVERY RECTIFIER

Features

SOD-323

directives



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	FR101WS	FR102WS	FR103WS	FR104WS	FR105WS	FR106WS	FR107WS	UNITS
Marking Code		1R	2R	3R	4R	5R	6R	7R	
Maximum repetitive peak reverse voltage	V _{RMM}	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	I _{F(AV)}	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	15							A
Maximum instantaneous forward voltage at 1.0A	V _F	1.3							V
Maximum DC reverse current T _A =25℃ at rated DC blocking voltage T _A =125℃	I _R	5 50							uA
Typical junction capacitance (NOTE 3)	C _J	5							pF
Typical reverse recovery time (NOTE 2)	T _{rr}	150				250	500		ns
Operating junction temperature range	T _J	-55 to +125							℃
Storage temperature range	T _{STG}	-55 to +150							℃

Note: 1. P.C.B. mounted with 0.2" X 0.2" (5 X 5 mm) copper pad areas.
2. Measured with $I_F=0.5A$, $I_R=1A$, $I_{rr}=0.25A$
3. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
4. The typical data above is for reference only.

Typical Characteristics

Fig.1 Forward Current Derating Curve

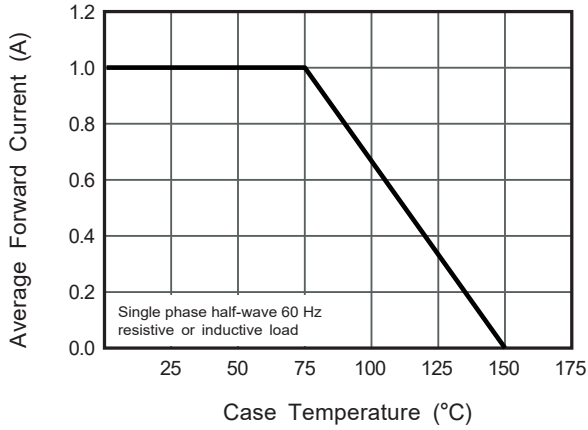


Fig.2 Typical Instantaneous Reverse Characteristics

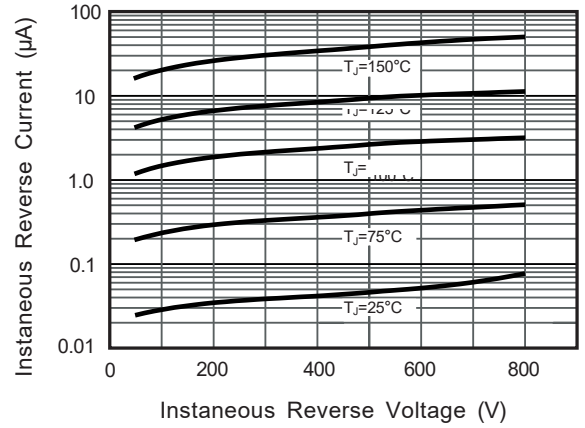


Fig.3 Typical Forward Characteristic

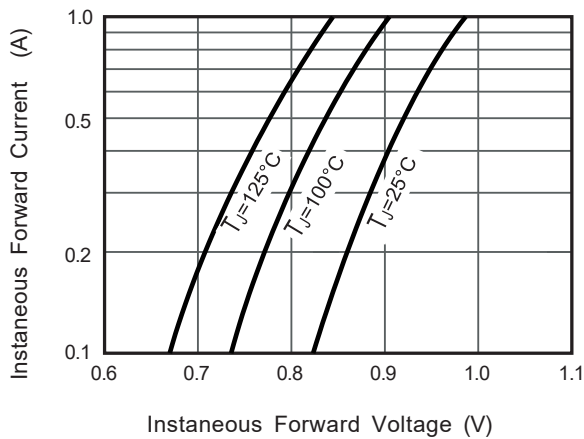


Fig.4 Typical Junction Capacitance

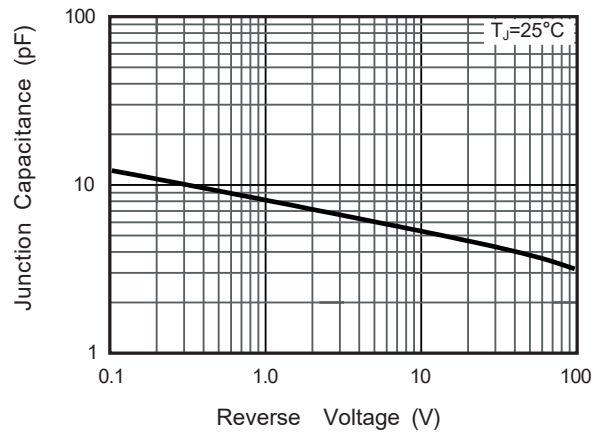
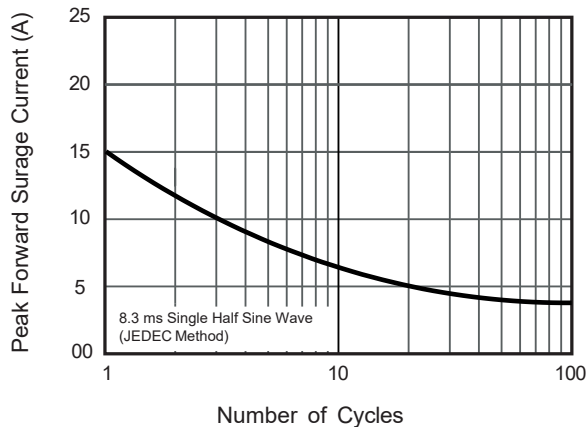


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.