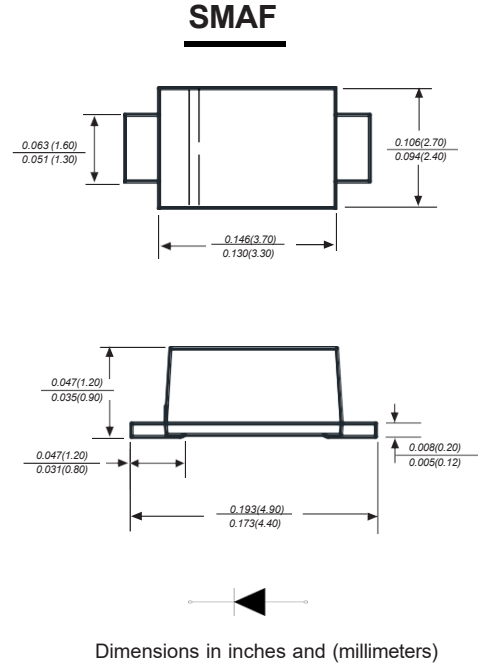


SURFACE MOUNT GENERAL PURPOSE SILICONRECTIFIER

Features

- ◆ For surface mounted applications
- ◆ Low profile packag
- ◆ Glass Passivated Chip Juntion
- ◆ Easy to pick and place
- ◆ Lead free in comply with EU RoHS 2011/65/EU directives



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	M20F	UNITS
Marking Code			
Maximum repetitive peak reverse voltage	V_{RMM}	2000	V
Maximum RMS voltage	V_{RMS}	1400	V
Maximum DC blocking voltage	V_{DC}	2000	V
Maximum average forward rectified current at $T_c=100^\circ\text{C}$	$I_{(AV)}$	1.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Maximum instantaneous forward voltage at 1A	V_F	1.1	V
Maximum DC reverse current $T_A=25^\circ\text{C}$ at rated DC blocking voltage $T_A=125^\circ\text{C}$	I_R	5 50	μA
Typical junction capacitance (NOTE 1)	C_J	20	pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	95	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

Typical Characteristics

Fig.1 Forward Current Derating Curve

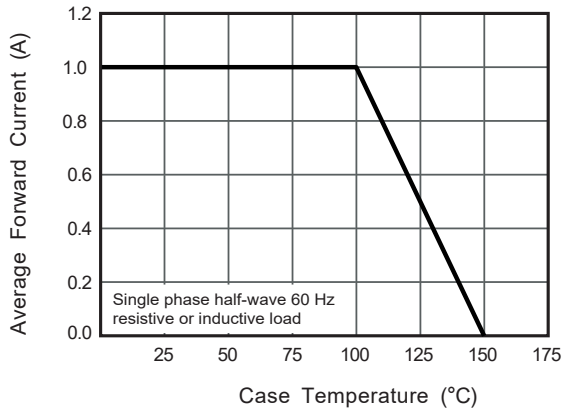


Fig.2 Typical Reverse Characteristics

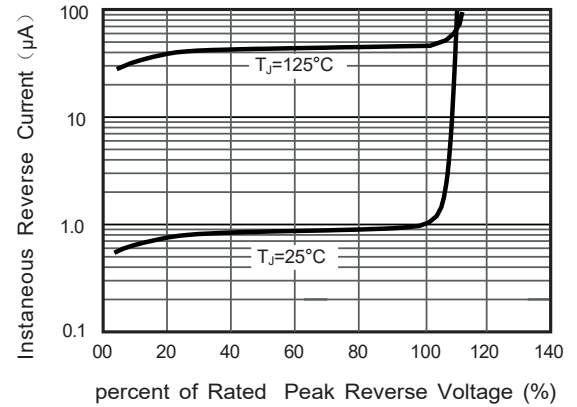


Fig.3 Typical Instaneous Forward Characteristics

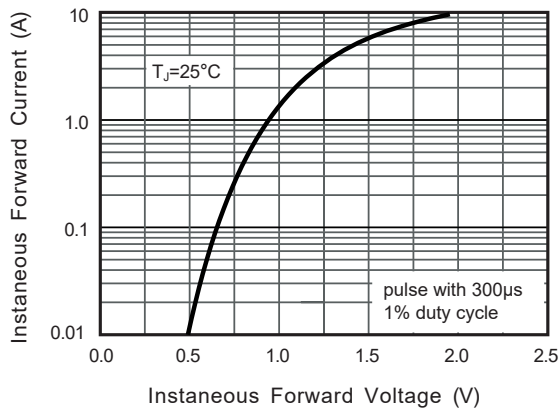


Fig.4 Typical Junction Capacitance

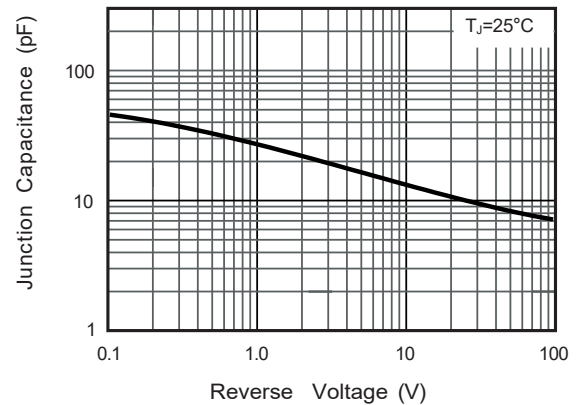
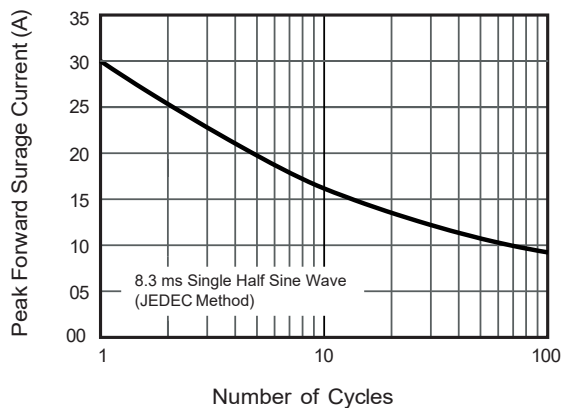


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



The curve above is for reference only.