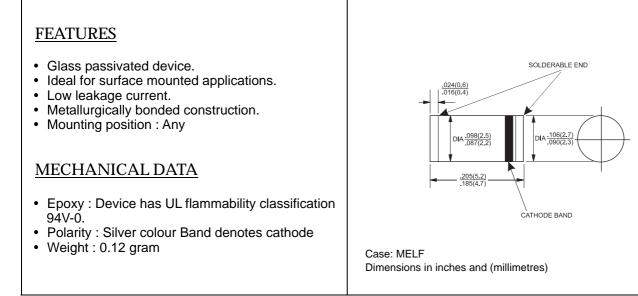
General Purpose Rectifier I.

1.0A Surface Mount Silicon Rectifier SM4001~SM4007

(Package: MELF (DO-213AB))



Ratings & Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified. Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

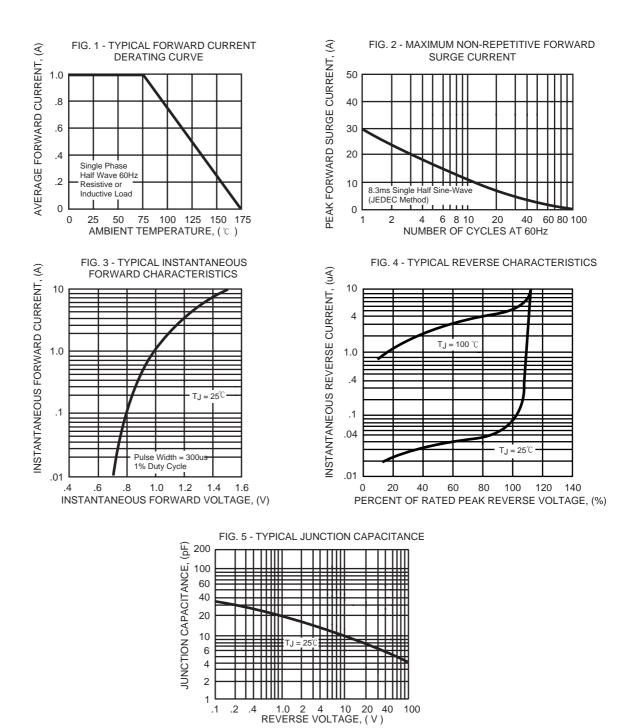
Characteristics	Symbol	SM 4001	SM 4002	SM 4003	SM 4004	SM 4005	SM 4006	SM 4007	Units
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Ta=75	Ι _Ο	1.0							Amps
Peak forward surge current I _{FM(surge)} : 8.3ms single half sine-wave superimposed on rated load. (JEDEC Method)	I _{FSM}	30							Amps
Maximum forward voltage at 1.0A	VF	1.1							Volts
Maximum full load reverse current, full cycle average at Ta=75	30								
Maximum DC average reverse current@ Ta=25at rated DC blocking voltage@ Ta=125	I _R 5.0 50								μA
Maximum thermal resistance	Rth-JL (2) Rth-JA (3)	20 50							/W
Typical junction capacitance (1)	Cj	15							PF
Operating and storage temperature range	Tj , Tstg	-65 to + 175							

Note :

1. Measured at 1.0 MHz and applied reverse voltage of 4.0VDC

Thermal resistance junction to terminal, 6.0mm² copper pads to each terminal.
Thermal resistance junction to ambient, 6.0mm² copper pads to each terminal.

Ratings and Characteristic Curves of SM4001~SM4007



2