SURFACE MOUNT RECTIFIERS

SM301 THRU SM307

3.0 AMPS. Surface Mount Rectifiers

Features

For surface mounted application

Low forward voltage drop

High current capability

Easy pick and place

High surge current capability

Plastic material used carries Underwrites Laboratory Classification 94V-O

High temperature soldering:250℃/10 seconds at terminals

Mechanical Data

Cases: SMA/DO-214AB Molded Plastic.

Terminals: Solder plated

Polarity: Indicated by cathode end

Packaging:16mm tape per EIA STD RS-481

Weight: 0.21 gram

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

Type Number	**SM301**	**SM302**	**SM303**	**SM304**	**SM305**	**SM306**	**SM307**	**Units**
Maximum Recurrent peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead length @T_L=75℃	3.0							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	100							A
Maximum Instantaneous Forward Voltage @3.0A	1.15							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	10.0 (@T_A=25℃) 250 (@T_A=125℃)							μA μA
Maximum Reverse Recovery Time (Note 1)	2.5							nS
Typical Junction Capacitance (Note 2)	60							pF
Operating Temperature Range T_J	-55 to +150							℃
Storage Temperature Range T_{STG}	-55 to +150							℃

Notes: 1.Reverse Recovery Test conditions: I_F=0.5A, I_R=1.0A, I_{RR}=0.25A

2.Measured at 1 MHz and Applied Reverse Voltage of 4.0 V.