SM5400-SM5408

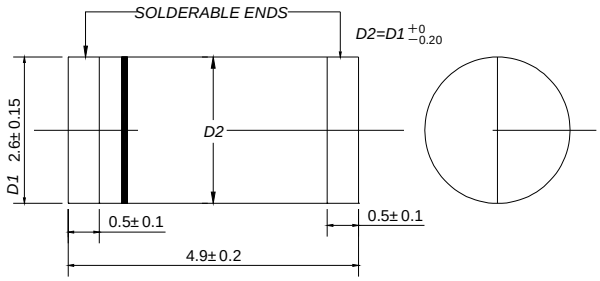
Surface Mount Rectifiers

VOLTAGE RANGE: 50 --- 1000 V
CURRENT: 3.0 A

DO - 213AB

Features

- ◇ Low cost
- ◇ Low leakage
- ◇ Low forward voltage drop
- ◇ High current capability
- ◇ Easily cleaned with Alcohol,Isopropanol and similar solvents
- ◇ The plastic material carries U/L recognition 94V-0



Dimensions in millimeters

Mechanical Data

- ◇ Case:JEDEC DO--213AB,MELF
- ◇ Polarity: Color band denotes cathode
- ◇ Weight: 0.0046 ounces, 0.116 grams
- ◇ Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

Single phase,half wave,50 Hz,resistive or inductive load. For capacitive load,derate by 20%.

		SM 5400	SM 5401	SM 5402	SM 5403	SM 5404	SM 5405	SM 5406	SM 5407	SM 5408	UNITS
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum average forw ard rectified current @T_A=50 ℃	$I_{F(AV)}$	3.0									A
Peak forw ard surge current 10ms single half-sine-w ave superimposed on rated load @T_A=25℃	I_{FSM}	100									A
Maximum instantaneous forw ard voltage @ 3.0 A	V_F	1.2									V
Maximum reverse current at rated DC blocking voltage	I_R	10.0									μA
Typical thermal resistance junction to terminal	R_{thT}	10									K/W
Typical thermal resistance (Note1)	R_{thA}	40									K/W
Operating junction temperature range	T_J	- 50 ---- + 175									℃
Storage temperature range	T_{STG}	- 50 ---- + 175									℃

NOTE: 1. Thermal resistance from junction to ambient.

SM5400-SM5408

Surface Mount Rectifiers

Ratings AND Charactieristic Curves

FIG.1 – FORWARD DERATING CURVE

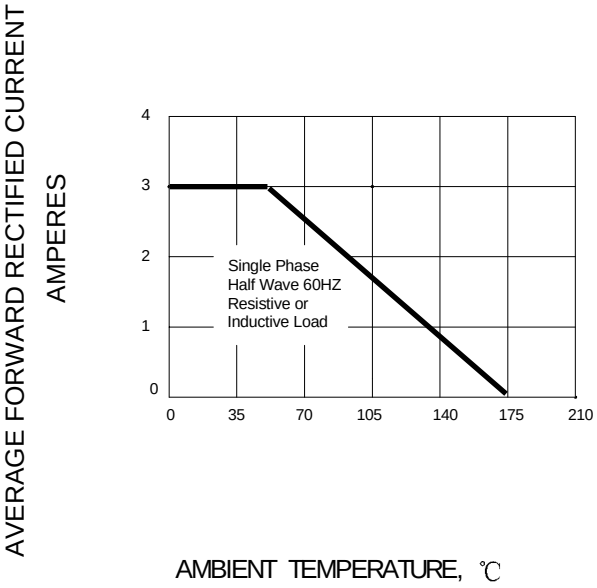


FIG.2 – PEAK FORWARD SURGE CURRENT

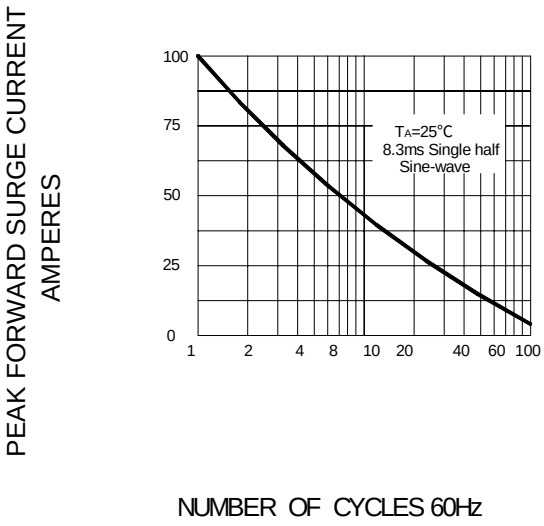


FIG.3 – TYPICAL FORWARD CHARACTERISTIC

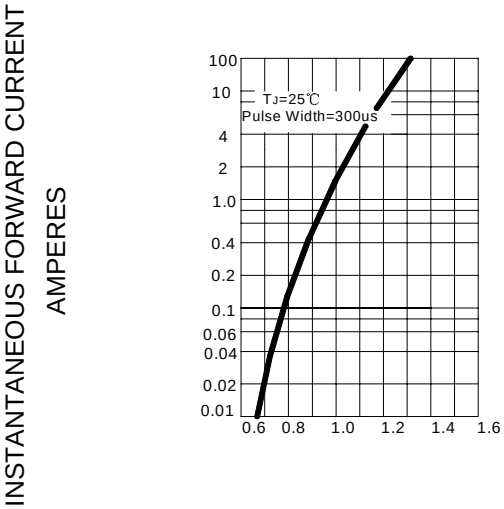


FIG.4 – TYPICAL JUNCTION CAPACITANCE