

II. Schottky Rectifier

8.0A Surface Mount Schottky Rectifier SS82~SS820

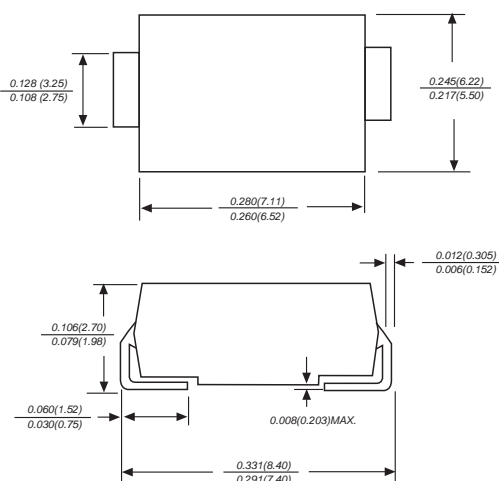
(Package: SMC (DO-214AB))

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Plastic material used carries Underwriters Laboratory Classification 94V-0
- Extremely low VF
- Majority carrier conduction
- High temperature soldering :
260 /10 seconds at terminals

MECHANICAL DATA

- Case : DO-214AB (SMC)
- Terminals : Solder plated
- Polarity : Indicated by cathode band
- Weight : 0.22 grams



Case: SMC
Dimensions in inches and (millimetres)

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	SS82	SS83	SS84	SS85	SS86	SS88	SS810	SS815	SS820	Units
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum average forward current 0.375" (9.5mm) lead length at $T_L = 75$	I_o	8.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150.0									Amps
Maximum instantaneous forward voltage at 8.0A	V_F	0.55		0.75		0.85		0.95		Volts	
Maximum DC reverse current $T_a = 25$ at rated DC blocking voltage $T_a = 100$	I_R	1.0 20.0									mA
Maximum thermal resistance (Note 2)	R_{th-JA} R_{th-JL}	75 20									/w
Operating junction temperature range	T_j	-50 to +125									
Storage and operating temperature range	T_{stg}	-55 to +150									

Notes:

1. Pulse test with Pulse Width = 300 μ sec., 1% duty cycle
2. Mounted on P.C. Board with 8mm² (0.13mm thick) copper pad areas

Ratings and Characteristic Curves of SS82~SS820

Fig.1 - FORWARD CURRENT DERATING CURVE

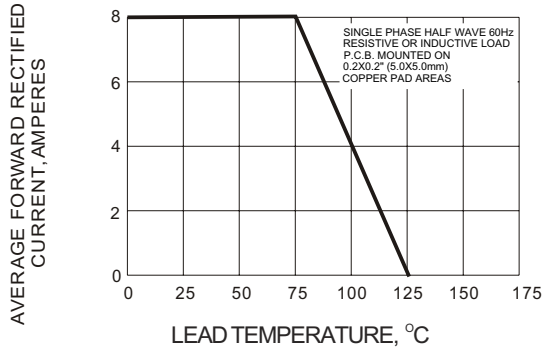


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

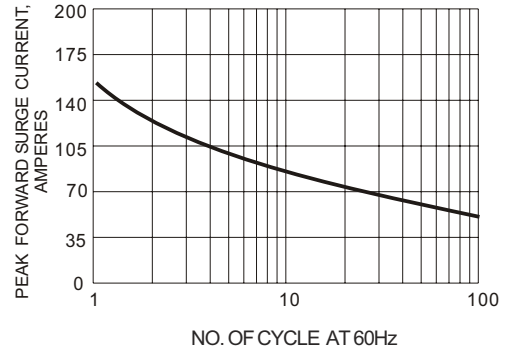


FIG.3-TYPICAL FORWARD CHARACTERISTICS

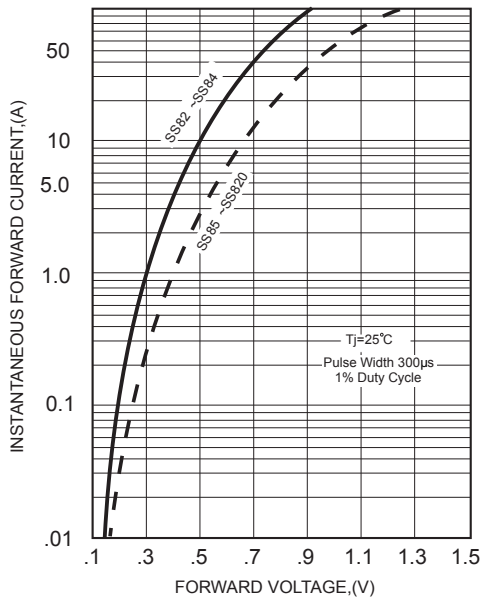


FIG.4-TYPICAL JUNCTION CAPACITANCE

