

## II. Schottky Rectifier

### 10.0A Surface Mount Schottky Rectifier SS102~SS1020

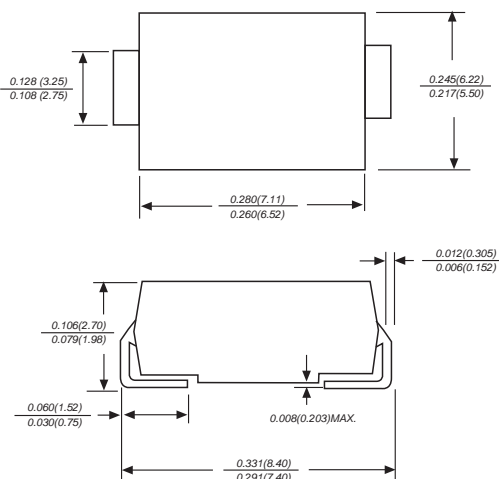
(Package: SMC (DO-214AB))

#### 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	SS102	SS103	SS104	SS105	SS106	SS108	SS1010	SS1015	SS1020	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 $T_L = 75$	$I_o$	10.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	200.0									Amps	
Maximum instantaneous forward voltage at 10.0A	$V_F$	0.65			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)	Rth-JA Rth-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 $\mu$ sec., 1% duty cycle
2. Mounted on P.C. Board with 8mm<sup>2</sup> (0.13mm thick) copper pad areas

# Ratings and Characteristic Curves of SS102~SS1020

Fig.1 - FORWARD CURRENT DERATING CURVE

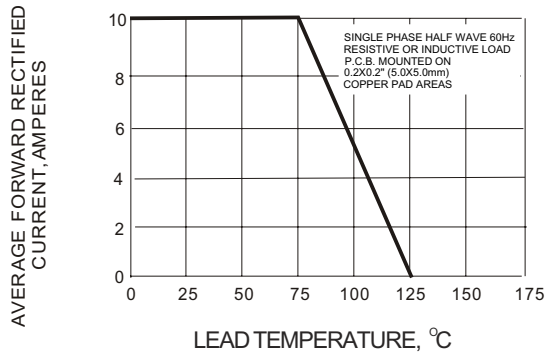


Fig.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

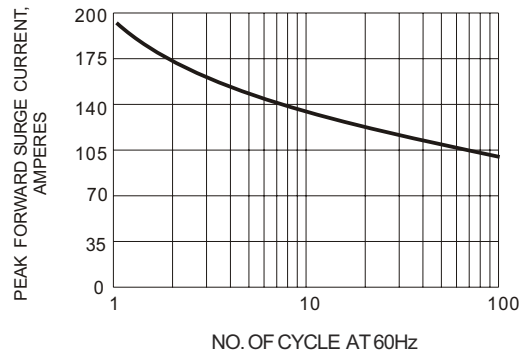


FIG.3-TYPICAL FORWARD CHARACTERISTICS

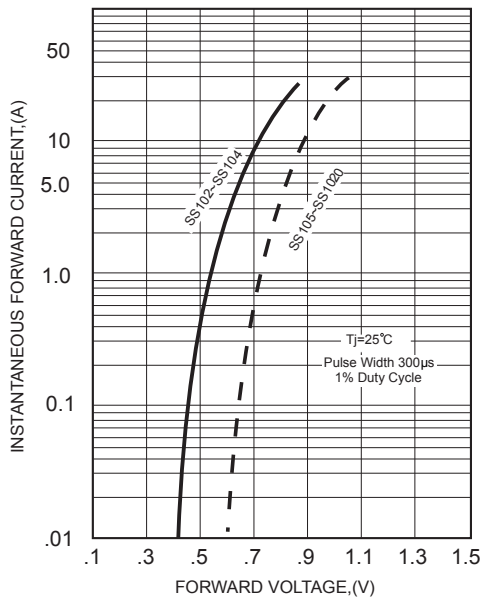


FIG.4-TYPICAL JUNCTION CAPACITANCE

