

## II. Schottky Rectifier

### 3.0A Surface Mount Schottky Rectifier SS32~SS320

(Package: SMC (DO-214AB))

<p><b>FEATURES</b></p> <ul style="list-style-type: none"> <li>• The plastic package carries Underwriters Laboratory flammability classification 94V-0</li> <li>• Metal silicon junction, majority carrier conduction</li> <li>• Low power loss, high efficiency</li> <li>• High forward surge current capability</li> <li>• High temperature soldering guaranteed : 250 /10 seconds at terminals</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case : JEDEC DO-214AB molded plastic body</li> <li>• Terminals : Solder plated, solderable per MIL-STD-750, method 2026</li> <li>• Polarity : Color band denotes cathode end</li> <li>• Mounting Position : Any</li> <li>• Weight : 0.220 grams</li> </ul>	<p>Case: SMC Dimensions in inches and (millimetres)</p>
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### 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%.

Characteristic	Symbol	SS 32	SS 33	SS 34	SS 35	SS 36	SS 38	SS 310	SS 315	SS 320	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 rectified current at TL (see Fig. 1)	$I_O$	3.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	70									Amps
Maximum instantaneous forward voltage at 3.0A DC	$V_F$	0.55		0.70		0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage $T_a = 25^\circ C$ $T_a = 100^\circ C$	$I_R$	0.5							1.0		mA
		20			10						
Typical junction capacitance (Note 1)	$C_j$	500			300					PF	
Typical thermal resistance (Note 2)	Rth-JA	55							62		$^\circ C/W$
Operating junction temperature range	$T_j$	-65 to +125			-65 to +150					$^\circ C$	
Storage temperature range	$T_{stg}$	-65 to +150									$^\circ C$

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts D.C.
2. P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.

# Ratings and Characteristic Curves of SS32~SS320

