

## II. Schottky Rectifier

### 6.0A Surface Mount Schottky Rectifier SS62~SS620

(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>• Built-in strain relief</li> <li>• Low forward voltage drop</li> <li>• Low power loss, high efficiency</li> <li>• High forward surge current capability</li> <li>• High temperature soldering guaranteed: 260°C / 10 seconds at terminals</li> </ul> <p><b>MECHANICAL DATA</b></p> <ul style="list-style-type: none"> <li>• Case : Molded plastic</li> <li>• Polarity : Color band denotes cathode</li> <li>• Weight : 0.220 grams</li> </ul>	<p>Case: SMC Dimensions in inches and (millimeters)</p>
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### Ratings & Electrical Characteristics

Characteristic	Symbol	SS	SS	SS	SS	SS	SS	SS	SS	SS	Units
		62	63	64	65	66	68	610	615	620	
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 $T_L = 75^\circ C$	$I_o$	6.0									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	150									Amps
Maximum instantaneous forward voltage at 6.0A DC	$V_F$	0.55		0.75		0.85		0.90		Volts	
Maximum average reverse current $T_a = 25^\circ C$ at rated DC blocking voltage $T_a = 100^\circ C$	$I_R$	1.0									mA
		20									
Maximum thermal resistance (Note 2)	$R_{th-JA}$	75									$^\circ C/W$
	$R_{th-JL}$	20									
Operating junction temperature range	$T_j$	-50 to +125									$^\circ C$
Storage temperature range	$T_{stg}$	-55 to +150									$^\circ C$

Notes:

1. Pulse test with PW = 300  $\mu sec.$ , 1% duty cycle.
2. Mounted on P.C. Board with 8 mm<sup>2</sup> (0.13mm thick) copper pad areas.

# Ratings and Characteristic Curves of SS62~SS620

Fig.1 FORWARD CURRENT DERATING CURVE

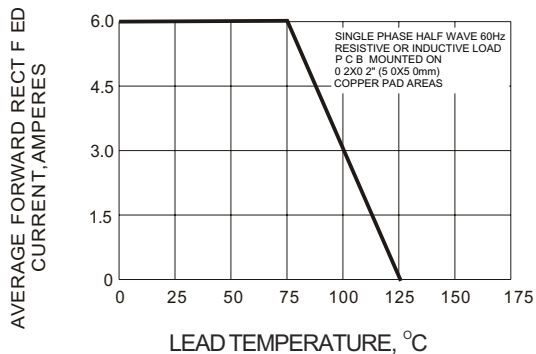


Fig.2 MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT

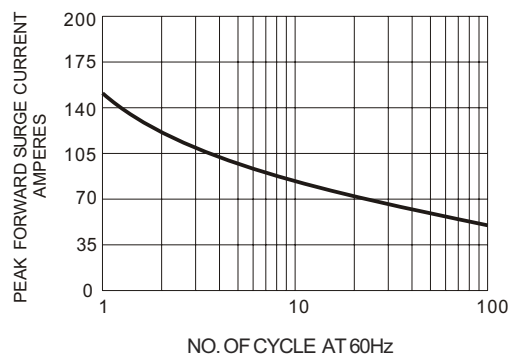


Fig.3 TYPICAL REVERSE CHARACTERISTIC

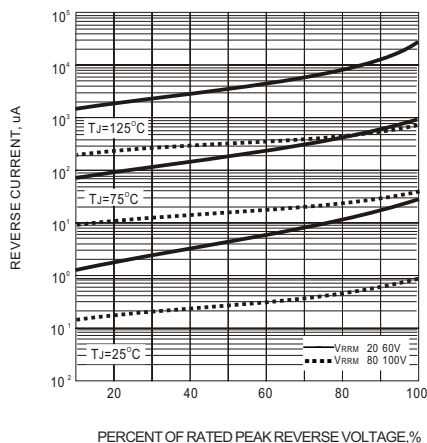


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

