

II. Schottky Rectifier

3.0A Schottky Rectifier SK320~SK3200

(Package: DO-15)

<p>FEATURES</p> <ul style="list-style-type: none"> • The plastic package carries Underwriters Laboratory Flammability Classification 94V-0 • Metal silicon junction, majority carrier conduction • Low power loss, high efficiency • High forward surge current capability • High temperature soldering guaranteed <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> • Case : JEDEC DO-15 molded plastic body • Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026 • Polarity : Color band denotes cathode end • Mounting Position : Any • Weight : 0.40 grams, 0.014 ounce 	<p>Case: DO-15 Dimensions in inches and (millimeters)</p>
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Ratings & Electrical Characteristics

Characteristic	Symbol	SK 320	SK 330	SK 340	SK 350	SK 360	SK 380	SK 3100	SK 3150	SK 3200	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 0.375" (9.5mm) lead length	I_O	3									Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80									Amps
Maximum forward voltage at 3.0A DC	V_F	0.55		0.70		0.85		0.90	0.95		Volts
Maximum reverse current at rated DC blocking voltage $T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	I_R	0.5									mA
		20			10						
Typical junction capacitance (Note 1)	C_j	250									PF
Typical thermal resistance (Note 2)	R_{th-JA}	40									$^\circ\text{C/W}$
Operating junction temperature range	T_j	-55 to +125			-55 to +150						$^\circ\text{C}$
Storage temperature range	T_{stg}	-55 to +150									$^\circ\text{C}$

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4.0 volts DC.

2. Thermal resistance from junction to lead vertical PCB mounted, 0.5" (12.7mm) lead length.

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Ratings and Characteristic Curves of SK320~SK3200

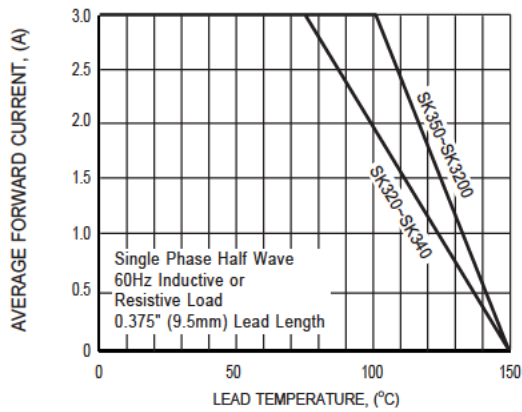


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

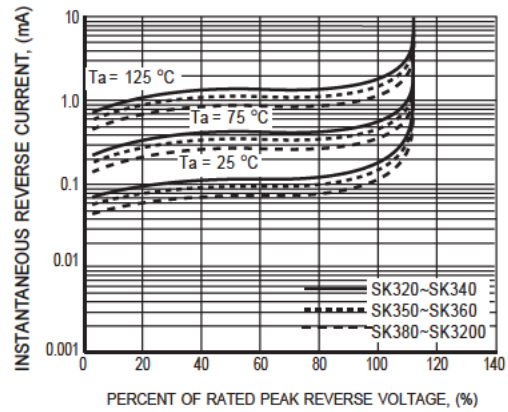


FIG.2 TYPICAL REVERSE CHARACTERISTICS

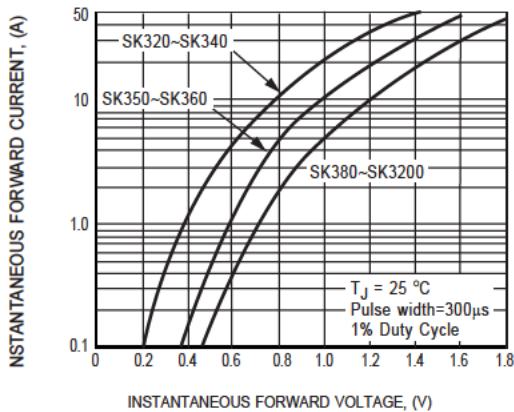


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

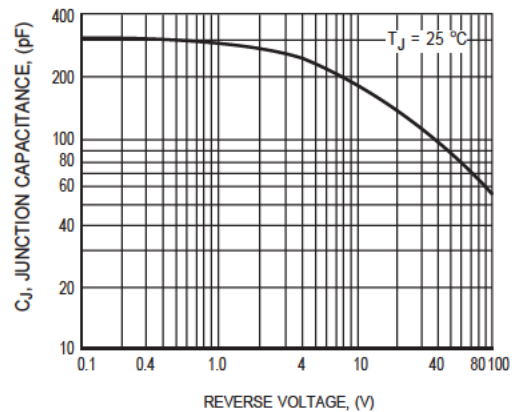


FIG.4 TYPICAL JUNCTION CAPACITANCE

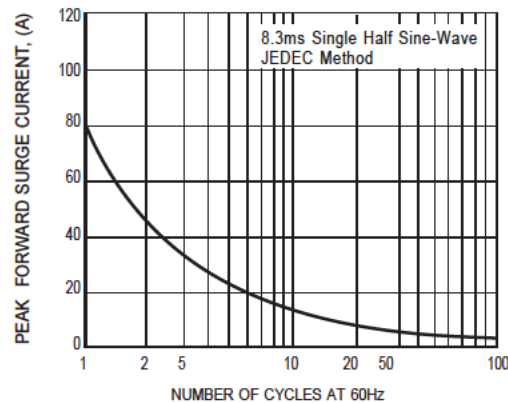


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT