



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**SM320
THRU
SM3100**

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 1000 Volts

CURRENT - 3.0 Amperes

FEATURES

- * High current capability
- * Ideal for surface mounted applications
- * Low leakage current for high efficiency

MECHANICAL DATA

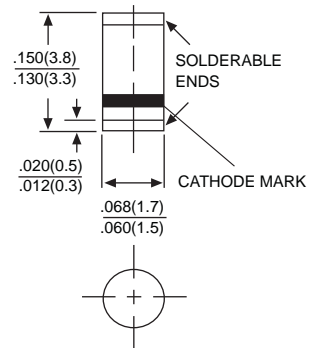
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.12 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



SM-2(DO-213AA)



Dimensions in inches and (millimeters)

	SYMBOL	SM320	SM330	SM340	SM350	SM360	SM380	SM3100	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	Volts
Maximum Average Forward Rectified Current at T _A =75°C	I _O	3.0							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 3.0A DC	V _F	.45	.55	.60	.70		.85		Volts
Maximum DC Reverse Current at @ T _A = 25°C	I _R	2.0							mAmps
Rated DC Blocking Voltage @ T _A = 100°C		20							
Typical Thermal Resistance (Note1)	R _{θJA}	50							°C/W
Typical Junction Capacitance (Note 2)	C _J	110							pF
Storage Operating Temperature Range	T _J , T _{STG}	-55 to + 125							°C

NOTES : 1. Thermal Resistance (Junction to Ambient), .24in2 (6.0mm2) copper pads to each terminal.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

RATING AND CHARACTERISTIC CURVES (SM320 THRU SM3100)

FIG.1
TYPICAL FORWARD CURRENT DERATING CURVE

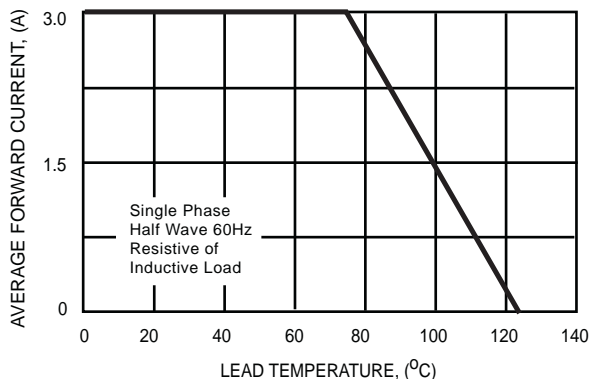


FIG.2
TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

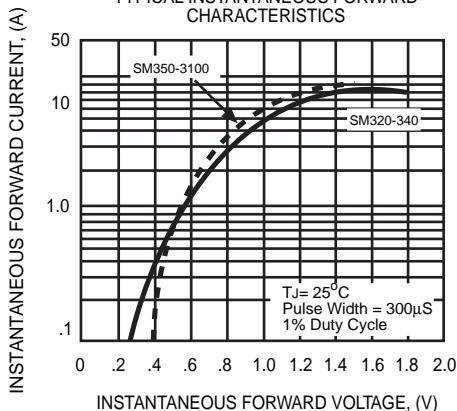


FIG.3
TYPICAL REVERSE CHARACTERISTICS

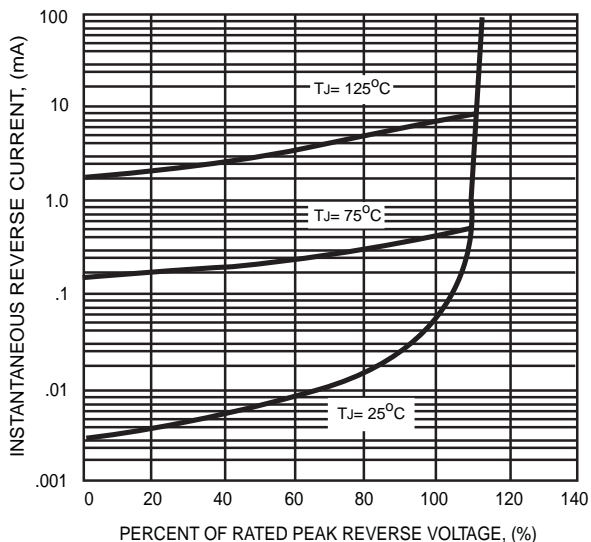


FIG.6
MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

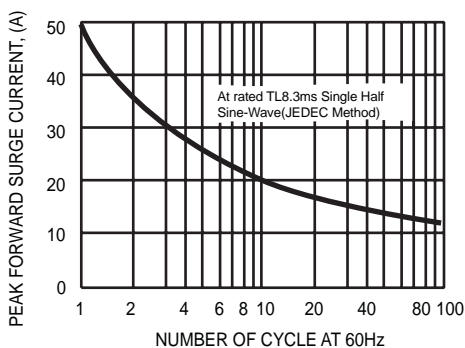
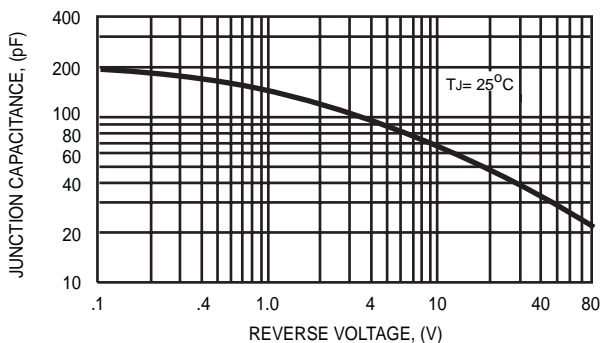


FIG.5
TYPICAL JUNCTION CAPACITANCE



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