

DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SM320 THRU SM360

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 60 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

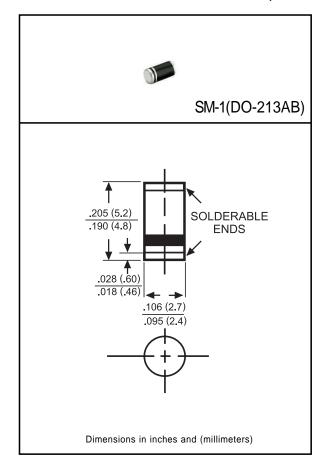
MIL-STD-202E, Method 208 guaranteed

* 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, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.



		SYMBOL	SM320	SM330	SM340	SM350	SM360	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage		VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage		VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at TA=90°C		lo	3.0					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	80				Amps	
Maximum Instantaneous Forward Voltage at 3.0A DC		VF	.475	.500	.525	.7	70	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@TA = 25°C	1-	1.0					mAmps
	@TA = 100°C	- IR	25					
Typical Thermal Resistance (Note1)		RθJA	40					°C/W
Typical Junction Capacitance (Note 2)		Cı	200					pF
Storage Operating Temperature Range		TJ, TSTG	-65 to + 125				۰C	

 $NOTES: \ \ 1.\ Thermal\ Resistance\ (Junction\ to\ Ambient),\ .24in_2\ (6.0mm_2)\ copper\ pads\ to\ each\ terminal.$

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

RATING AND CHARACTERISTIC CURVES (SM320 THRU SM360)

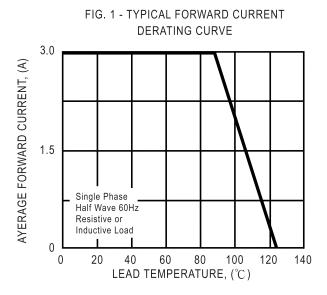


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARCTERISTICS INSTANTANEOUS FORWARD CURRENT, (A) 20 SM320 10 1.0 TJ = 25℃ Pulse Width = 300uS 1% Duty Cycle 0.1 .3 1.3 1.5 1.7 1.9 2.1 .1 1.1 INSTANTANEOUS FORWARD VOLTAGE, (V)

FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

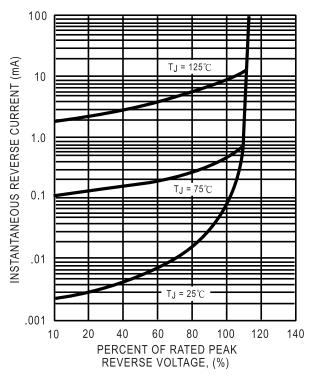


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

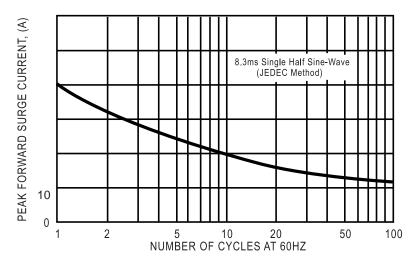
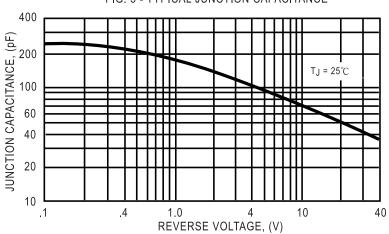


FIG. 5 - TYPICAL JUNCTION CAPACITANCE





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