



DC COMPONENTS CO., LTD.
RECTIFIER SPECIALISTS

**SM120M
THRU
SM160M**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 20 to 60 Volts

CURRENT - 0.5 Ampere

FEATURES

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

MECHANICAL DATA

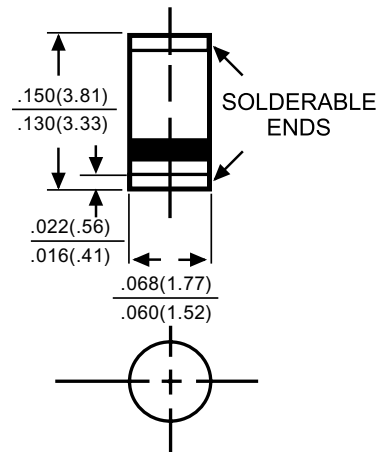
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.036 gram

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%.



SM-2(DO-213AA)



Dimensions in inches and (millimeters)

	SYMBOL	SM120M	SM130M	SM140M	SM150M	SM160M	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	IO	0.5					Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	25					Amps
Maximum Instantaneous Forward Voltage at 0.5A DC	VF	.45	.55	.60	.75		
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@TA = 25°C					mAmps
		@TA = 100°C					
Typical Thermal Resistance (Note1)	RθJA	75					°C/W
Typical Junction Capacitance (Note 2)	CJ	110					pF
Storage Operating Temperature Range	TJ, TSTG	-65 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 (SM120M THRU SM160M)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

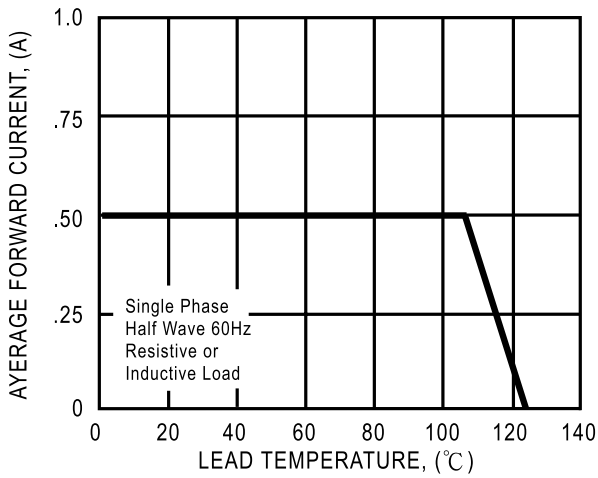


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

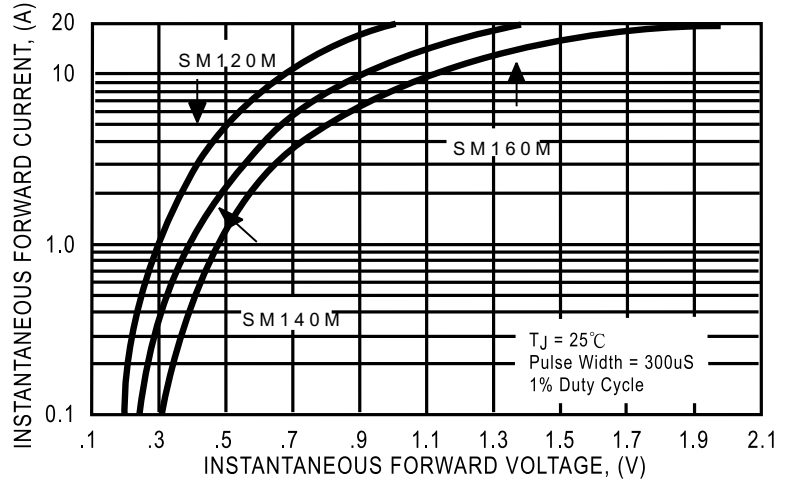


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS

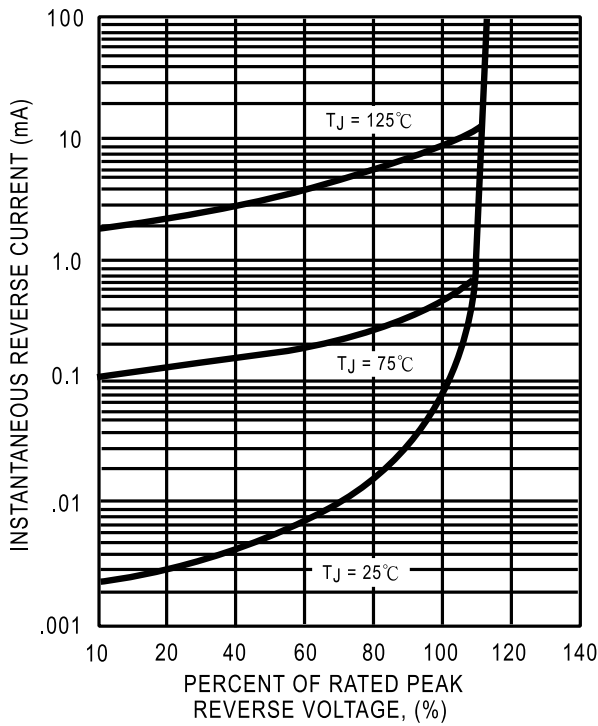


FIG. 4 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

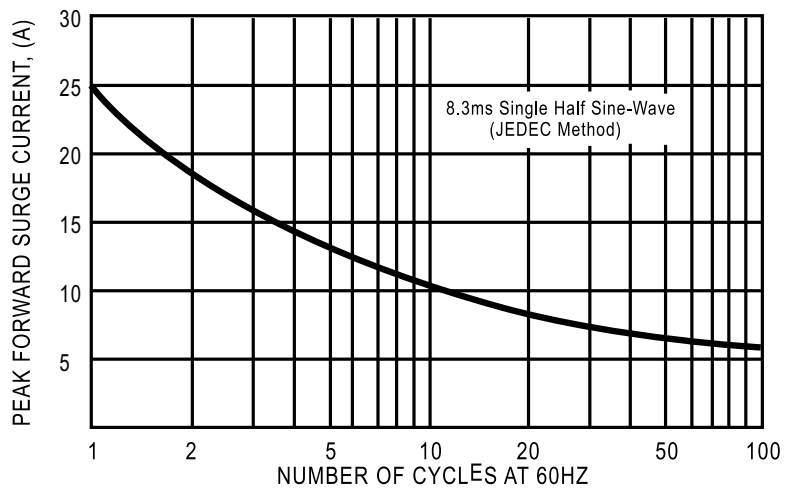


FIG. 5 - TYPICAL JUNCTION CAPACITANCE

