



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

SM150
THRU
SM1100

TECHNICAL SPECIFICATIONS OF SCHOTTKY BARRIER RECTIFIER

VOLTAGE RANGE - 50 to 100 Volts

CURRENT - 1.0 Ampere

FEATURES

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

MECHANICAL DATA

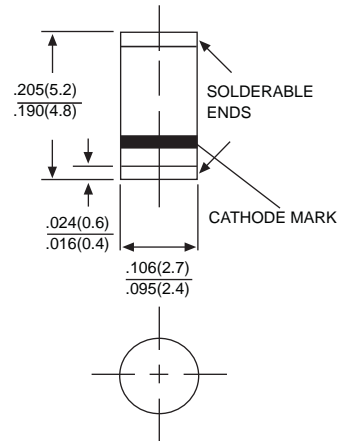
- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solder plated solderable per MIL-STD-750, Method 2026
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.036 gram

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-1(DO-213AB)



Dimensions in inches and (millimeters)

	SYMBOL	SM150	SM160	SM180	SM1100	UNITS
Maximum Recurrent Peak Reverse Voltage	VRRM	50	60	80	100	Volts
Maximum RMS Voltage	VRMS	35	42	56	70	Volts
Maximum DC Blocking Voltage	VDC	50	60	80	100	Volts
Maximum Average Forward Rectified Current at TA = 55°C	IO	1.0				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	0.70		0.85		Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	IR	@TA = 25°C	1.0			mAmps
		@TA = 100°C	10			
Typical Thermal Resistance (Note 1)	RθJA	75				°C/W
Typical Junction Capacitance (Note 2)	CJ	80				pF
Storage Operating Temperature Range	TJ, TSTG	-55 to +150				°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 (SM150 THRU SM1100)

FIG.1 - TYPICAL FORWARD CURRENT DERATING CURVE

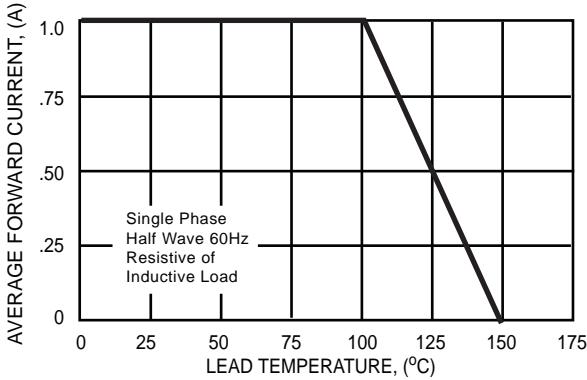


FIG.2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

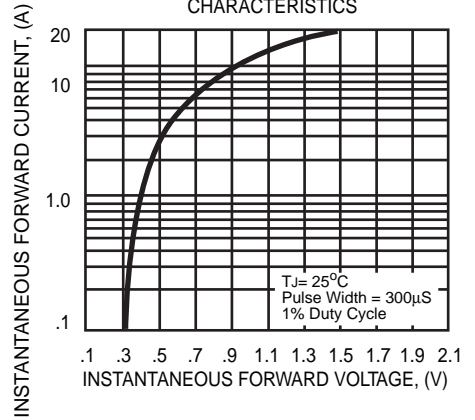


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

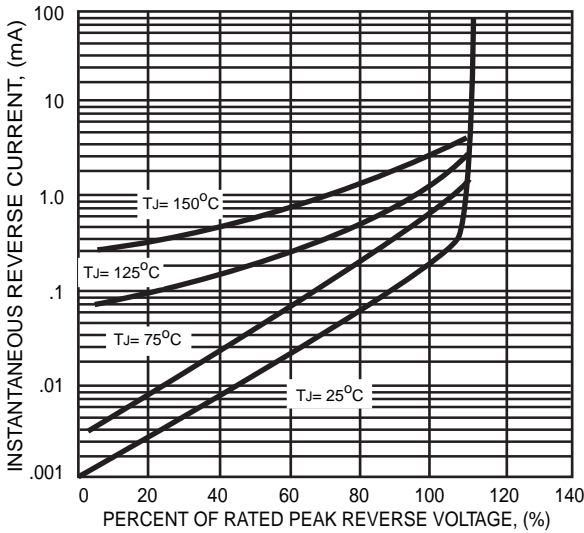


FIG.6 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

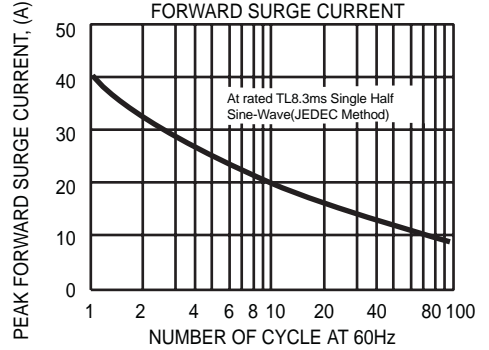
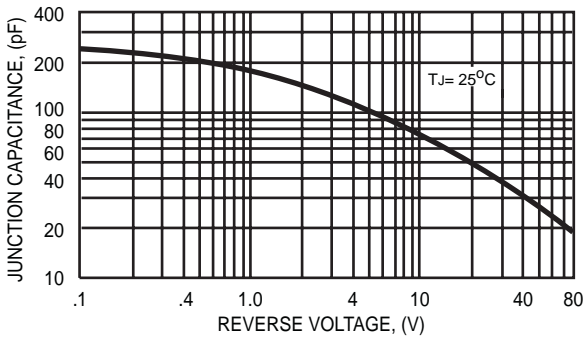


FIG.5 - TYPICAL JUNCTION CAPACITANCE



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