

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

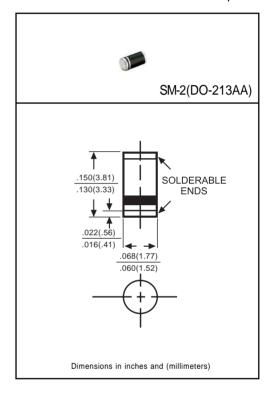
* Mounting position: Any

* 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%.

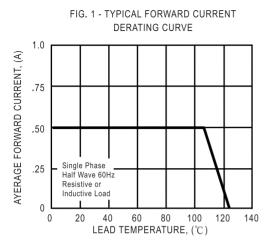


		SYMBOL	SM120M	SM130M	SM140M	SM150M	SM160M	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	20	30	40	50	60	Volts
Maximum RMS Voltage		VRMS	14	21	28	35	42	Volts
Maximum DC Blocking Voltage		VDC	20	30	40	50	60	Volts
Maximum Average Forward Rectified Current at TA=90°C		lo	0.5					Amps
Peak Forward Surge 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	.7	7 5	
Maximum DC Reverse Current at Rated DC Blocking Voltage	@Ta = 25°C	1-	1.0					mAmps
	@TA = 100°C	lr.	10					
Typical Thermal Resistance (Note1)		RθJA	75					°C/W
Typical Junction Capacitance (Note 2)		Cı	110					pF
Storage Operating Temperature Range		TJ, TSTG	-65 to + 125				۰C	

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)



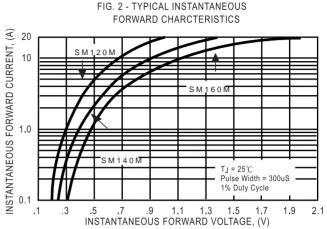


FIG. 3 - TYPICAL REVERSE CHARACTERISTICS 100 INSTANTANEOUS REVERSE CURRENT (mA) TJ = 125℃ 10 1.0 TJ = 75°C 0.1 .01 TJ = 25℃ .001 10 20 40 60 80 100 120 140 PERCENT OF RATED PEAK REVERSE VOLTAGE, (%)

