RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SM2000

SURFACE MOUNT GLASS PASSIVATED SILICON RECTIFIER

VOLTAGE RANG 2000 Volts CURRENT 1.0 Ampere

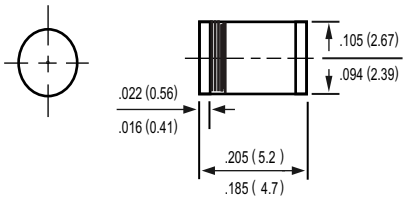
FEATURES

* Glass passivated device
* Ideal for surface mounted applications
* Low leakage current
* Metallurgically bonded construction
* Mounting position: Any

MECHANICAL DATA

* Epoxy : Device has UL flammability classification 94V-0

MELF



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

MAXIMUM RATINGS (@ TA=25 °C unless otherwise noted)

RATINGS	SYMBOL	SM2000	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	Volts
Maximum RMS Voltage	V_{RMS}	1400	Volts
Maximum DC Blocking Voltage	V_{DC}	2000	Volts
Maximum Average Forward Rectified Current at terminals T_T = 75°C	I_O	1.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30	Amps
Current Squarad Time	I^2t	3.75	A^2 Sec
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	45	°C/W
Typical Thermal Resistance (Note 1)	$R_{\theta JT}$	10	°C/W
Typical Junction Capacitance (Note 2)	C_J	15	pF
Operating Temperature Range	T_J	-55 to + 175	°C
Storage Temperature Range	T_{STG}	-55 to + 175	°C

ELECTRICAL CHARACTERISTICS(@TA=25 °C unless otherwise noted)

CHARACTERISTICS		SYMBOL	SM2000	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		V_F	1.2	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	5.0	uA
at Rated DC Blocking Voltage	@T_A = 100°C		50	uA

NOTES : 1. Thermal Resistance :Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

2018-09/78
REV:O

RATING AND CHARACTERISTICS CURVES (SM2000)

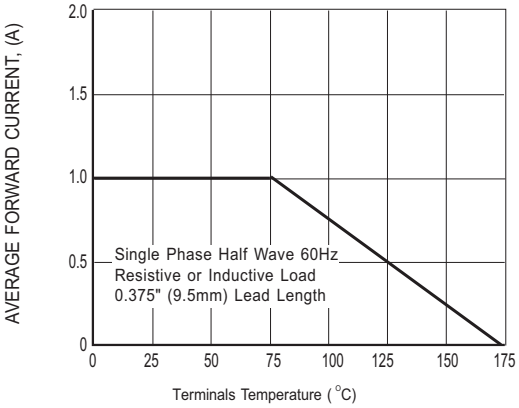


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

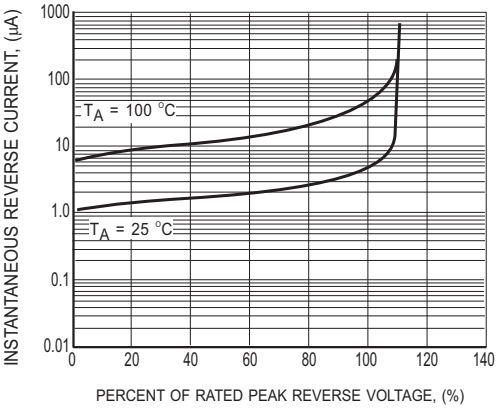


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

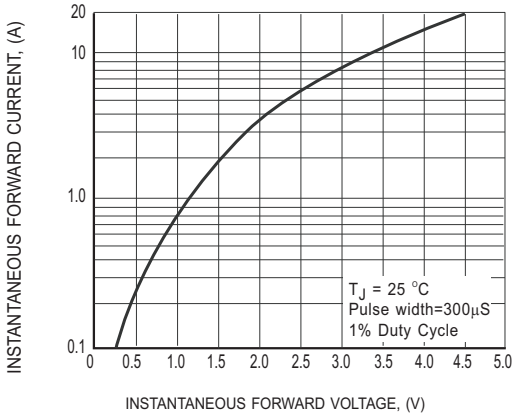


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

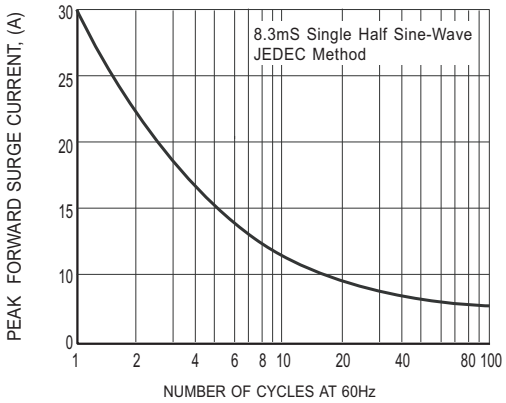
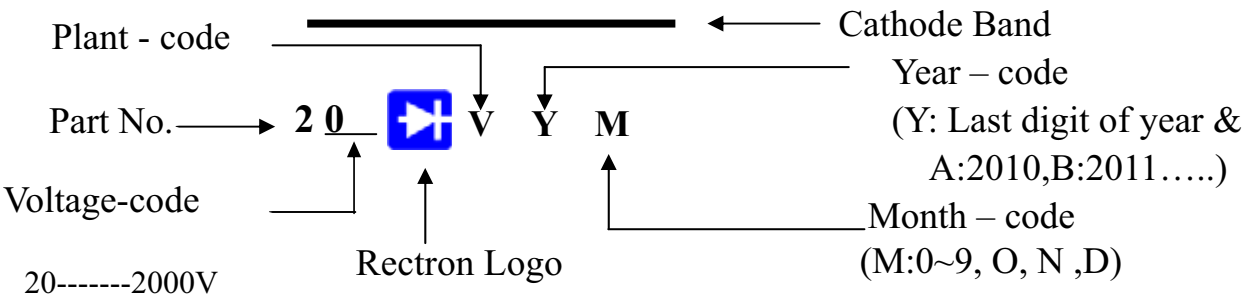


FIG.4 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mark Description



PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MELF	-T	1,500	6,000	---	---	178	390*205*310	48,000	10.19
MELF	-W	5,000	10,000	---	---	330	360*355*360	80,000	18.04

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