RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

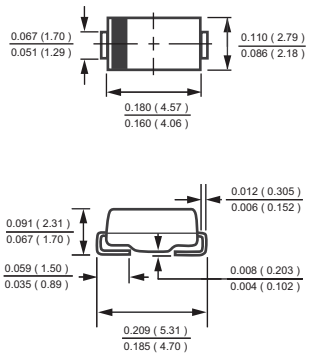
FM2000

SURFACE MOUNT
GLASS PASSIVATED SILICON RECTIFIER
VOLTAGE 2000 Volts CURRENT 1.0 Ampere

FEATURES

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

DO-214AC



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	FM2000	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 Temperature	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	FM2000	UNITS
Maximum Instantaneous Forward Voltage at 1.0A DC		V_F	1.1	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	2.0	µA
	@T_A = 150°C		1.0	mA
Typical Reverse Recovery Time (Note 3)		trr	2.0	uSec

2020-01
REV: B

NOTES : 1. Thermal Resistance :Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. Test Conditions: I_F= 0.5A, I_R= -1.0A, I_{RR}= -0.25A.

RATING AND CHARACTERISTICS CURVES (FM2000)

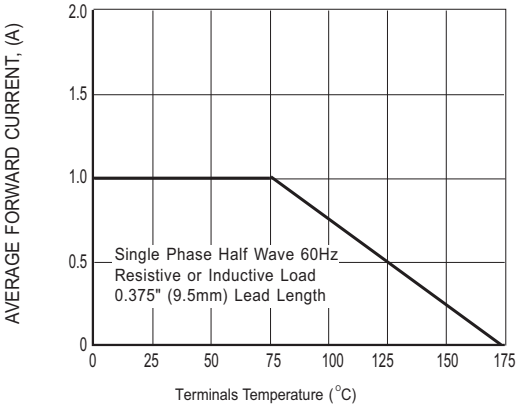


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

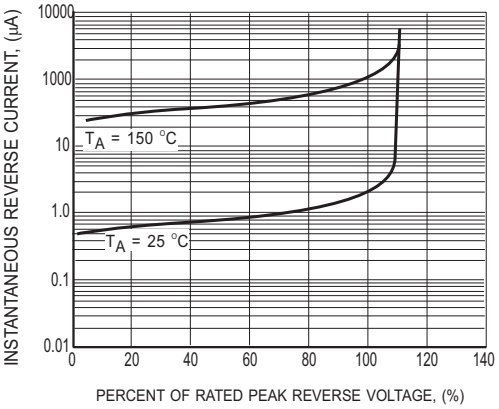


FIG.2 MAXIMUM REVERSE CHARACTERISTICS

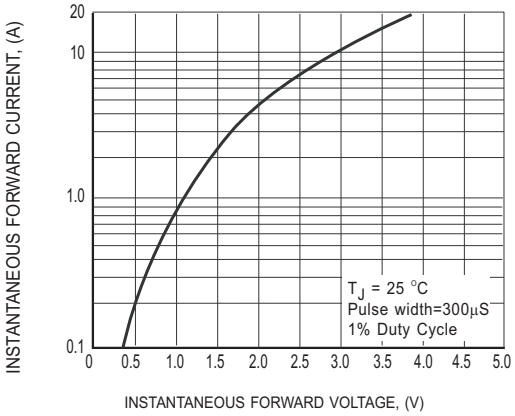


FIG.3 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

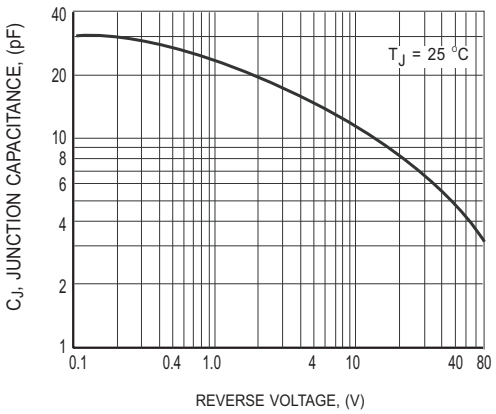


FIG.4 TYPICAL JUNCTION CAPACITANCE

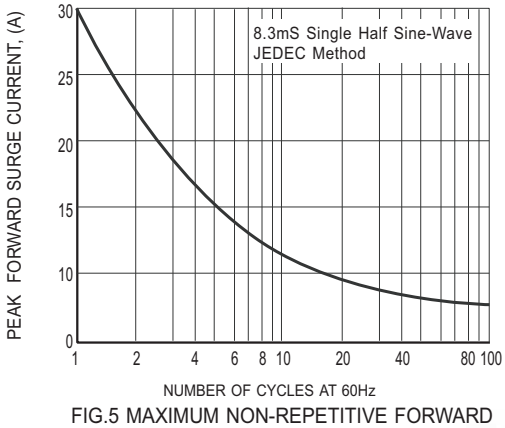
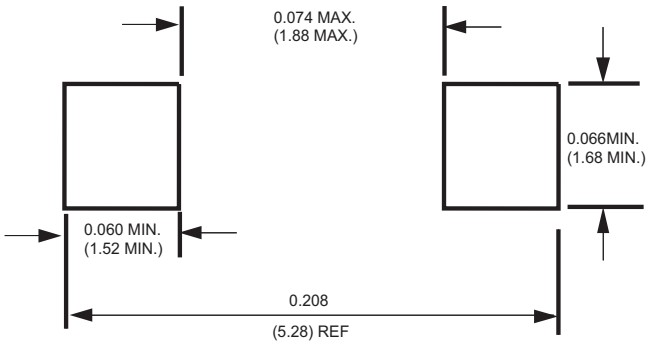


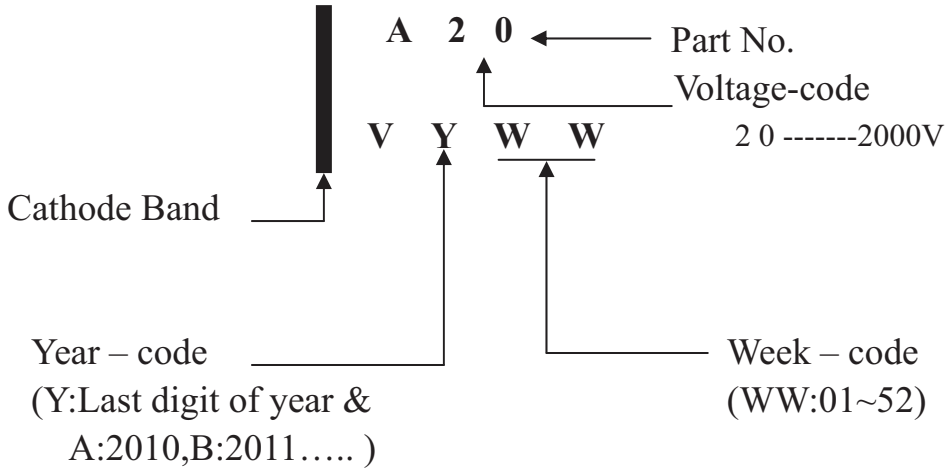
FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

Mounting Pad Layout



Dimensions in inches and (millimeters)

Marking 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)
SMA	-W	7,500	15,000	---	---	330	360*355*360	120,000	15.2

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)
SMA	-T	2,000	8,000	---	---	178	390*205*310	64,000	7.8

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