RECTRON
SEMICONDUCTOR
TECHNICAL SPECIFICATION

FM4032W

SURFACE MOUNT SILICON RECTIFIER

VOLTAGE 3200 Volts CURRENT 0.2 Ampere

FEATURES

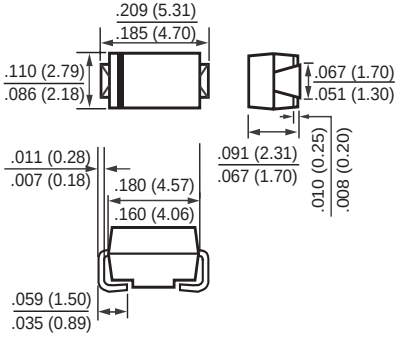
* Ideal for surface mounted applications
* Low leakage current
* Metallurgically bonded construction
* Mounting position: Any
* Weight: 0.057 gram

MECHANICAL DATA

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



SMX



Dimensions in inches and (millimeters)

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%.

MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS	SYMBOL	FM4032W	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	3200	Volts
Maximum RMS Voltage	V_{RMS}	2240	Volts
Maximum DC Blocking Voltage	V_{DC}	3200	Volts
Maximum Average Forward Rectified Current at T_A = 50°C	I_O	0.2	Amps
Peak Forward Surge Current I_{FM}(surge): 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	25	Amps
Maximum Thermal Resistance	(Note 2) $R\theta_{JL}$	60	°C/W
	(Note 3) $R\theta_{JA}$	100	°C/W
Typical Junction Capacitance (Note 1)	C_J	15	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 150	°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	FM4032W	UNITS
Maximum Forward Voltage at 0.2A DC		V_F	1.8	Volts
Maximum Full Load Reverse Current, Full cycle Average at T_A=75°C		I_R	30	uAmps
Maximum DC Average Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C		5.0	uAmps
	@T_A = 125°C		100	uAmps

NOTES : 1. Measured at 1.0 MHz and applied average voltage of 4.0VDC
2. Thermal resistance junction to terminal 6.0mm² coppeer pads to each terminal.
3. Thermal resistance junction to ambient, 6.0mm² coppeer pads to each terminal.

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RATING AND CHARACTERISTIC CURVES (FM4032W)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

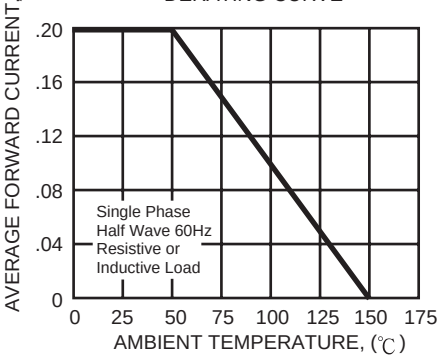


FIG. 2 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

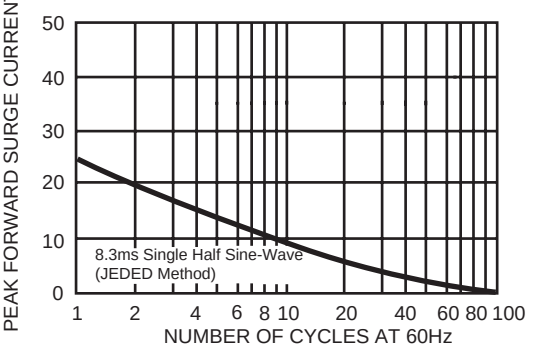


FIG. 3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

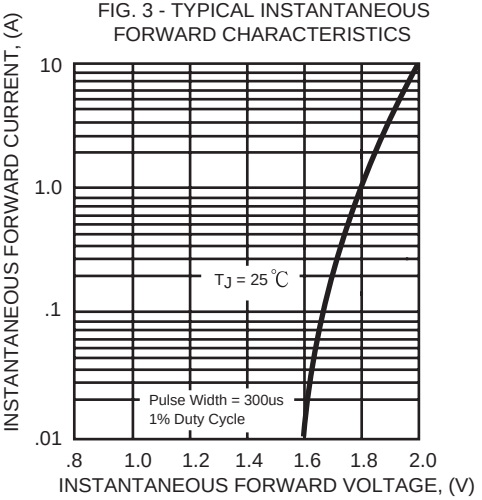
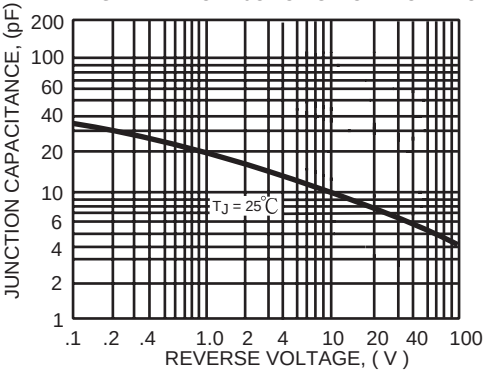
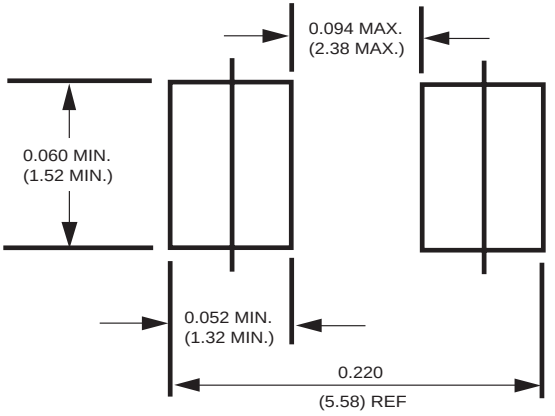


FIG. 4 - TYPICAL JUNCTION CAPACITANCE



Mounting Pad Layout



Dimensions in inches and (millimeters)