RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

FM345F

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

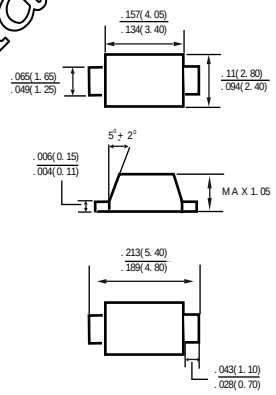
VOLTAGE 45 Volts CURRENT 3.0 Amperes

FEATURES

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

MECHANICAL DATA

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



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

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

RATINGS	SYMBOL	FM345F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	45	Volts
Maximum RMS Voltage	V_{RMS}	31.5	Volts
Maximum DC Blocking Voltage	V_{DC}	45	Volts
Max Avg Forword Rectify Current at Ambient Temp needs To be corrected to Lead Temperature,TL=100°C	I_O	3.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80	Amps
Typical Current Square Time	I^2T	26.5	A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	55	°C/W
	$R_{\theta JL}$	17	
Typical Junction Capacitance (Note 2)	C_J	200	pF
Operating Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to + 150	°C

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

CHARACTERISTICS		SYMBOL	FM345F	UNITS
Maximum Instantaneous Forward Voltage at 3.0A DC		V_F	.65	Volts
Maximum Average Reverse Current	@T_A = 25°C	I_R	0.2	mA
at Rated DC Blocking Voltage	@T_A = 100°C		2	mA

NOTES : 1. Thermal Resistance : Mounted on PCB.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. “Fully ROHS compliant”, “100% Sn plating (Pb-free)”.
4. Available in Halogen-free epoxy by adding suffix -HF after the part no

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RATING AND CHARACTERISTICS CURVES (FM345F)

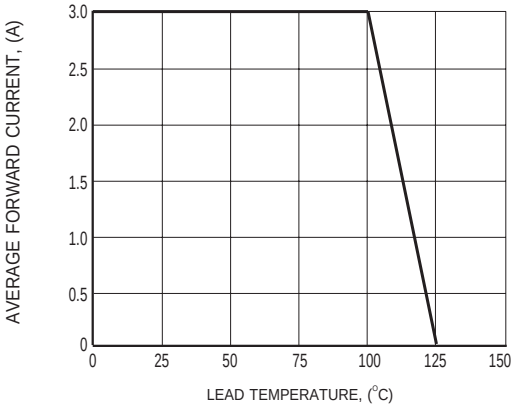

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

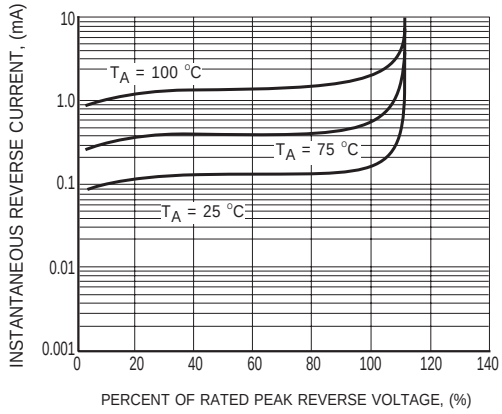

FIG.2 TYPICAL REVERSE CHARACTERISTICS

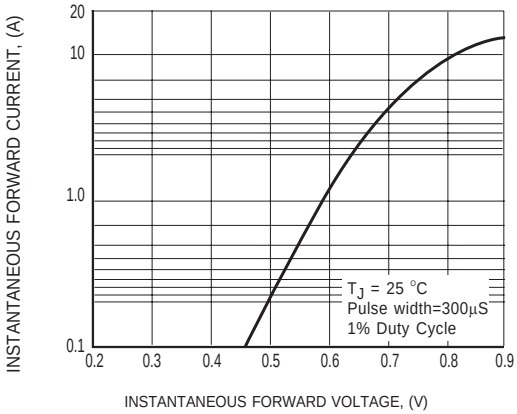

FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

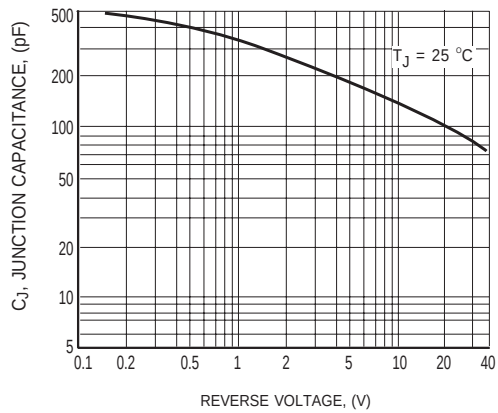

FIG.4 TYPICAL JUNCTION CAPACITANCE

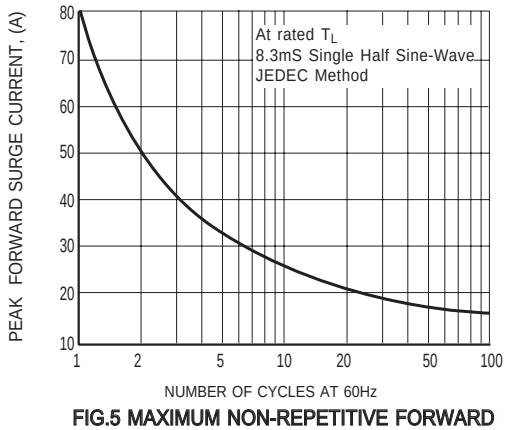

FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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