RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

SPAC803F

GLASS PASSIVATED SILICON RECTIFIER

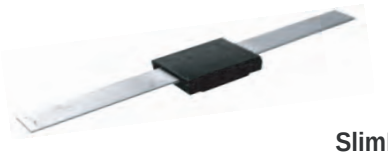
VOLTAGE 200 Volts CURRENT 8.0 Ampere

FEATURES

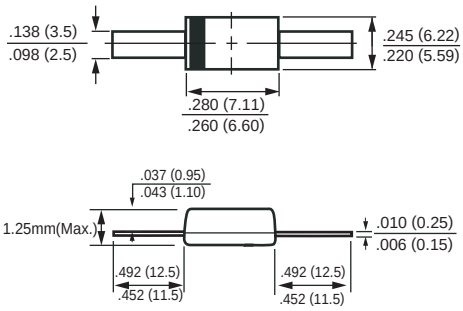
* Low leakage
* Low forward voltage drop
* High current capability
* High surge capability
* High reliability

MECHANICAL DATA

* Case: Slim PAQ
* Epoxy: Device has UL flammability classification 94V-O
* Lead: MIL-STD-202E method 208C guaranteed
* Mounting position: Any



SlimPAQ



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 (@ T_A=25 °C unless otherwise noted)

RATINGS	SYMBOL	SPAC803F	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	Volts
Maximum RMS Voltage	V_{RMS}	140	Volts
Maximum DC Blocking Voltage	V_{DC}	200	Volts
Maximum Average Forward Rectified Current at T_C = 125 °C	I_O	8.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125	Amps
Typical Current Square Time	I^2T	64.8	A^2S
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	6.25	°C/W
	$R_{\theta JA}$	12.5	
	$R_{\theta JL}$	3.1	
Typical Junction Capacitance (Note 2)	C_J	40	pF
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to + 175	°C

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

CHARACTERISTICS		SYMBOL	SPAC803F	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC		V_F	1.1	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T_A = 25°C	I_R	10	mAmps
	@T_A = 100°C		100	

NOTES : 1. Thermal Resistance : Heat-sink case mounted or if PCB mounted.
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
3. "Fully ROHS compliant", "100% Sn plating (Pb-free)".
4. Suffix "R" for Reverse Polarity.
5. Available in Halogen-free epoxy by adding suffix -HF after the part nbr.

2010-05
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RATING AND CHARACTERISTICS CURVES (SPAC803F)

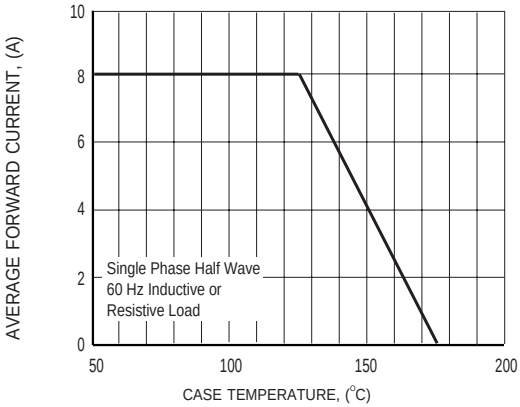

FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

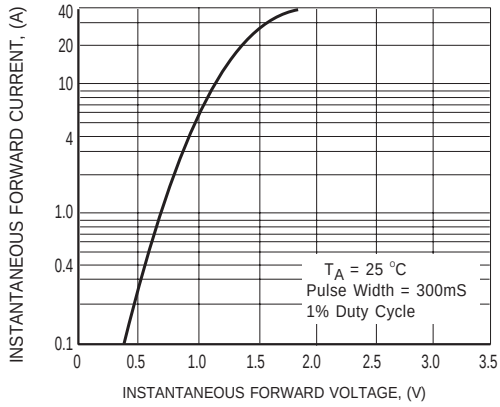

FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

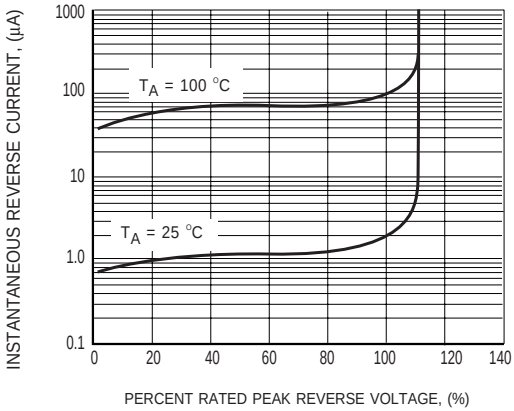

FIG.3 TYPICAL REVERSE CHARACTERISTICS

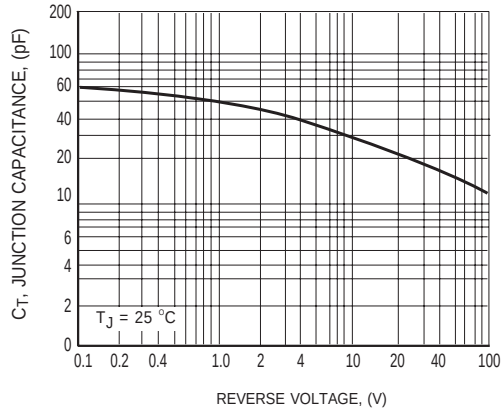

FIG.4 TYPICAL JUNCTION CAPACITANCE

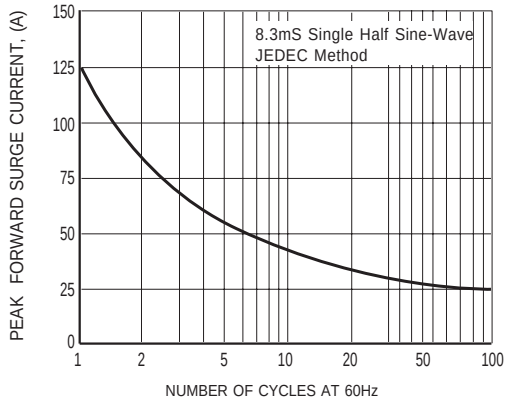

FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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