



**GLASS PASSIVATED SILICON RECTIFIER**

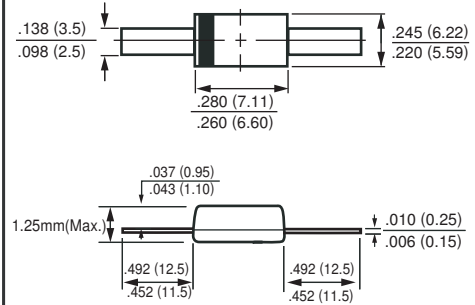
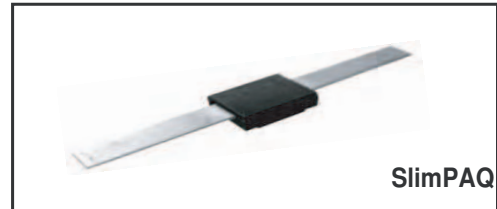
**VOLTAGE 200 Volts CURRENT 8.0 Ampere**

**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-0
- \* Lead: MIL-STD-202E method 208C guaranteed
- \* Mounting position: Any



**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)**

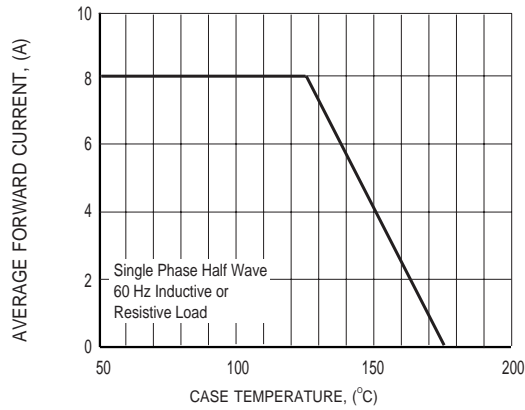
RATINGS	SYMBOL	SPAC803F	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	Volts
Maximum RMS Voltage	$V_{RMS}$	140	Volts
Maximum DC Blocking Voltage	$V_{DC}$	200	Volts
Maximum Average Forward Rectified Current at $T_C = 125^\circ C$	$I_O$	8.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	125	Amps
Typical Current Square Time	$I^2T$	64.8	A <sup>2</sup> S
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 (@TA=25 °C unless otherwise noted)**

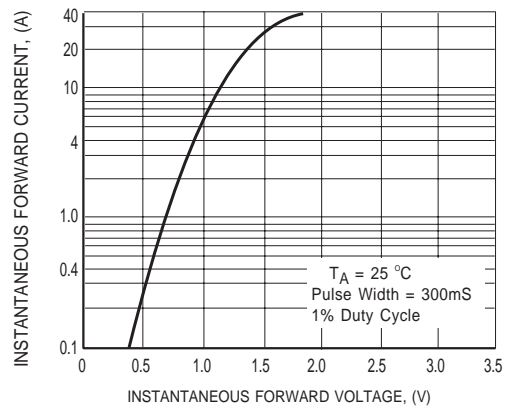
CHARACTERISTICS	SYMBOL	SPAC803F	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	$V_F$	1.1	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A = 25^\circ C$	10	mAmps
	@ $T_A = 100^\circ C$	100	

- 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.

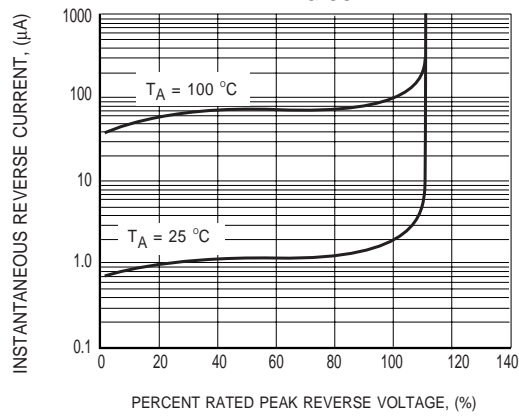
## RATING AND CHARACTERISTICS CURVES ( SPAC803F )



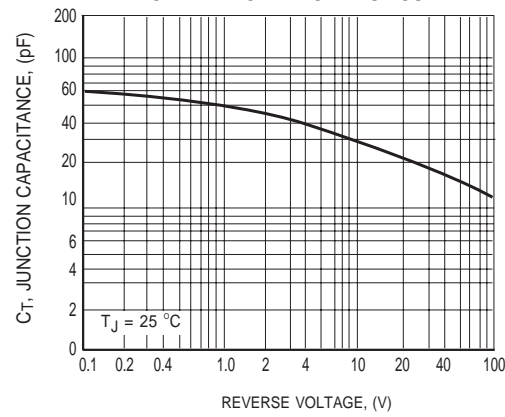
**FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE**



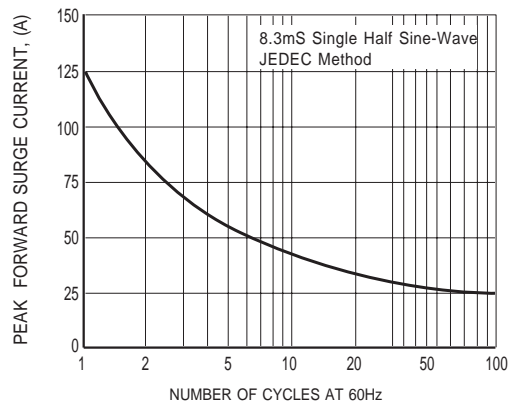
**FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



**FIG.3 TYPICAL REVERSE CHARACTERISTICS**



**FIG.4 TYPICAL JUNCTION CAPACITANCE**



**FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**

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