



GLASS PASSIVATED SILICON RECTIFIER

VOLTAGE 200 Volts CURRENT 8.0 Ampere

FEATURES

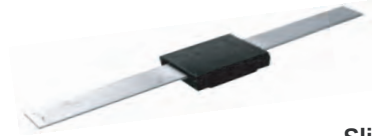
- * Low leakage
- * Low forward voltage drop
- * High current capability
- * High surge capability
- * High reliability

MECHANICAL DATA

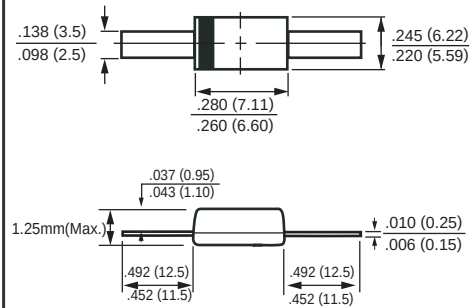
- * Case: Slim PAQ
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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



SlimPAQ



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 ² 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.

2010-05
REV: B

RATING AND CHARACTERISTICS CURVES (SPAC803F)

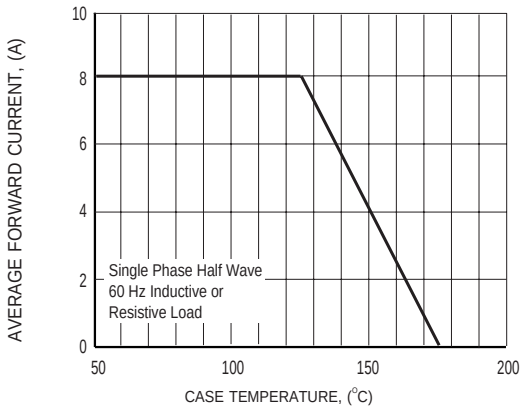


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

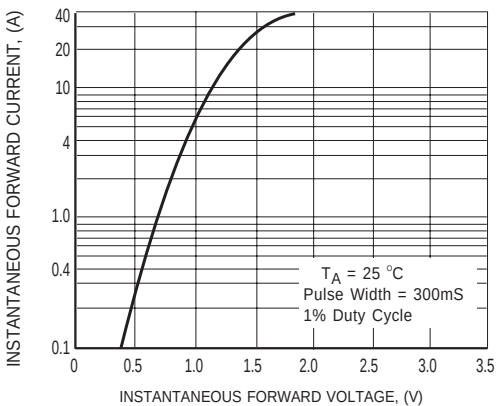


FIG.2 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

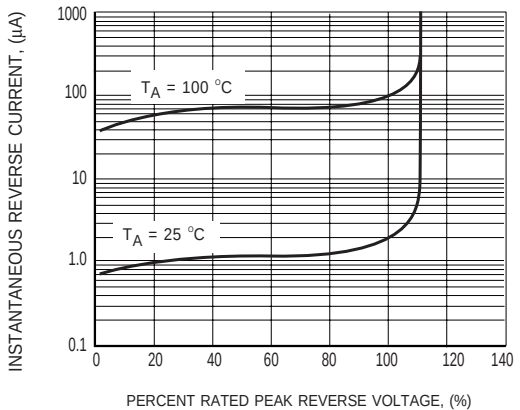


FIG.3 TYPICAL REVERSE CHARACTERISTICS

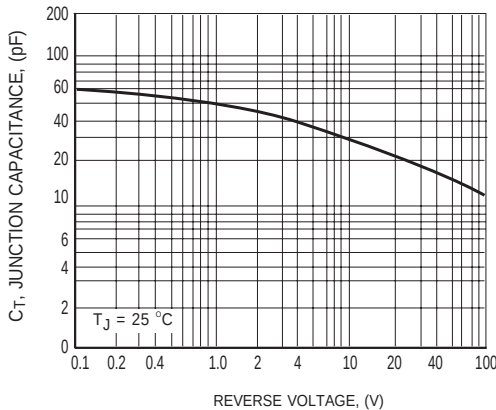


FIG.4 TYPICAL JUNCTION CAPACITANCE

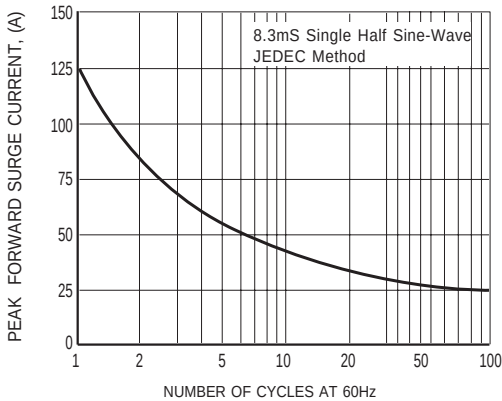


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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