



GLASS PASSIVATED SILICON RECTIFIER

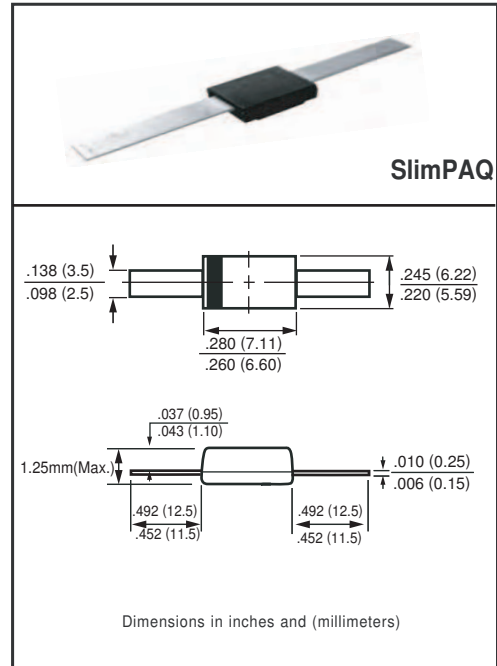
VOLTAGE 200 Volts CURRENT 12 Ampere

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



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)

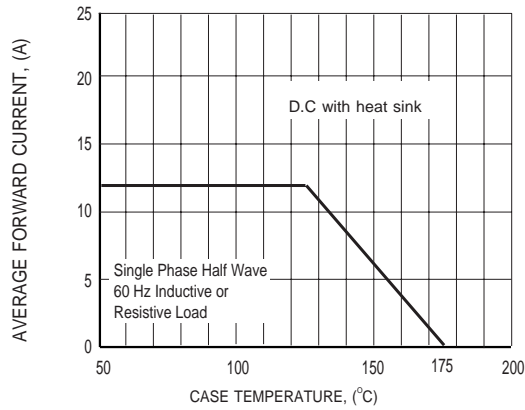
RATINGS	SYMBOL	SPAC1203F	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	200	Volts
Maximum RMS Voltage	V _{RMS}	140	Volts
Maximum DC Blocking Voltage	V _{DC}	200	Volts
Maximum Average Forward Rectified Current at T _C = 125 °C	I _O	12	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	125	Amps
Typical Current Square Time	I ² T	64.8	A ² S
Typical Thermal Resistance (Note 1)	R _{θJC}	4.1	°C/W
	R _{θJA}	8.3	
	R _{θJL}	1.6	
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)

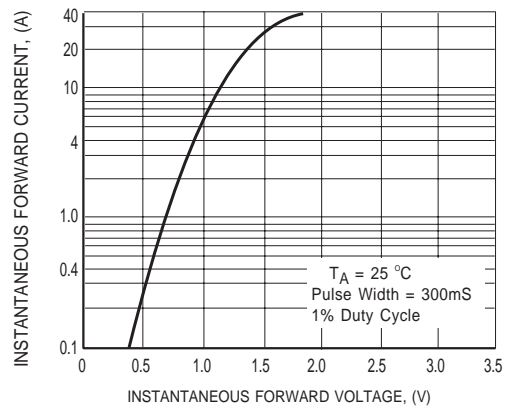
CHARACTERISTICS	SYMBOL	SPAC1203F	UNITS
Maximum Instantaneous Forward Voltage at 12 A DC	V _F	1.1	Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	@T _A = 25°C	10	μAmps
	@T _A = 100°C	100	

- 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.

RATING AND CHARACTERISTICS CURVES (SPAC1203F)



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



**FIG.2 TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS**

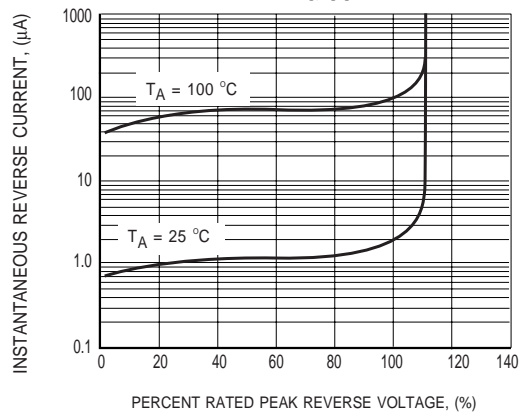


FIG.3 TYPICAL REVERSE CHARACTERISTICS

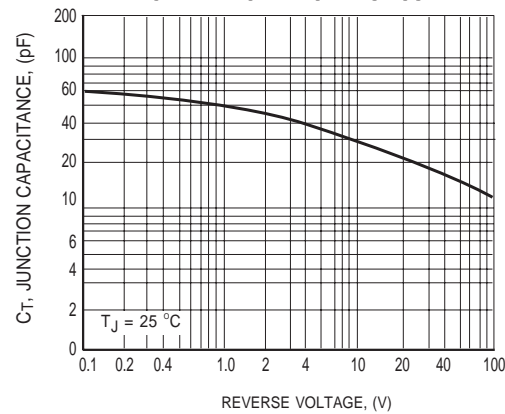
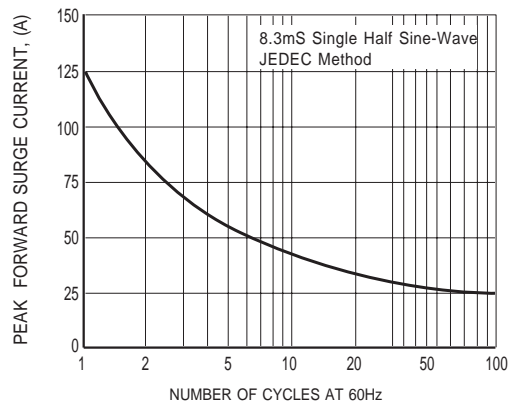


FIG.4 TYPICAL JUNCTION CAPACITANCE



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

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