

SR840-C-S-R01

SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 Volts CURRENT 8.0 Amperes

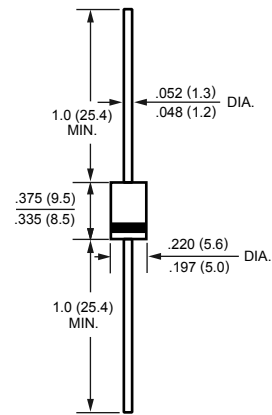
FEATURES

- * Low switching noise
- * Low forward voltage drop
- * Low thermal resistance
- * High current capability
- * High surge capability
- * High reliability
- * Ideal for Solar applications such as By-Pass and Blocking diodes

MECHANICAL DATA

- * Case: DO-201AD axial-leaded, molded plastic
- * Epoxy: Device has UL flammability classification 94V-0
- * Lead: MIL-STD-202E method 208C guaranteed
- * Mounting position: Any
- * Weight: 1.135 grams

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

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

RATINGS	SYMBOL	SR840-C-S-R01	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	Volts
Maximum RMS Voltage	V_{RMS}	28	Volts
Maximum DC Blocking Voltage	V_{DC}	40	Volts
Maximum Average Forward Rectified Current at Derating Lead Temperature	I_O	8.0	Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	150	Amps
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	2.5	°C/W
	$R_{\theta JA}$	60	
Typical Junction Capacitance (Note 3)	C_J	700	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	SR840-C-S-R01	UNITS
Maximum Instantaneous Forward Voltage at 8.0A DC	V_F	.66	Volts
Maximum Average Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A = 25^\circ\text{C}$	0.2
		@ $T_A = 100^\circ\text{C}$	2

- NOTES :
1. Thermal Resistance : Heat-sink mounted.
 2. Suffix "R" for Reverse Polarity.
 3. Measured at 1 MHz and applied reverse voltage of 4.0 volts.
 4. "Fully ROHS compliant", "100% Sn plating (Pb-free)".

2008-11
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RATING AND CHARACTERISTICS CURVES (SR840-C-S-R01)

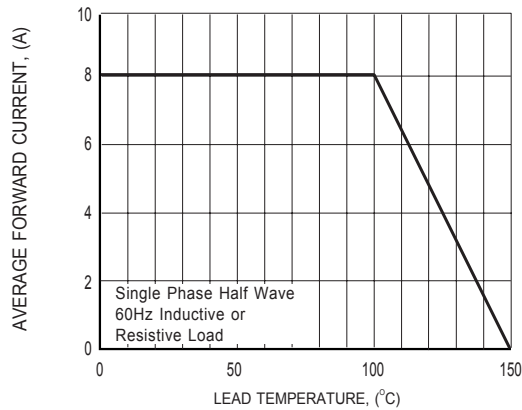


FIG.1 TYPICAL FORWARD CURRENT DERATING CURVE

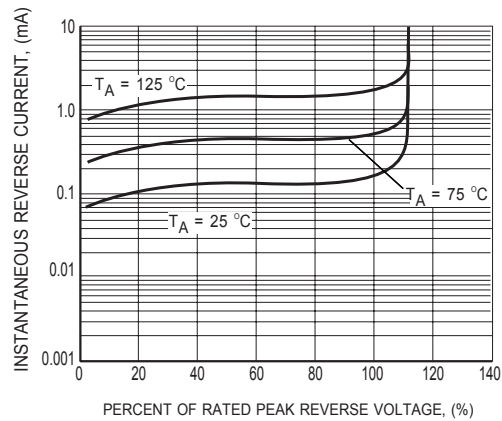


FIG.2 TYPICAL REVERSE CHARACTERISTICS

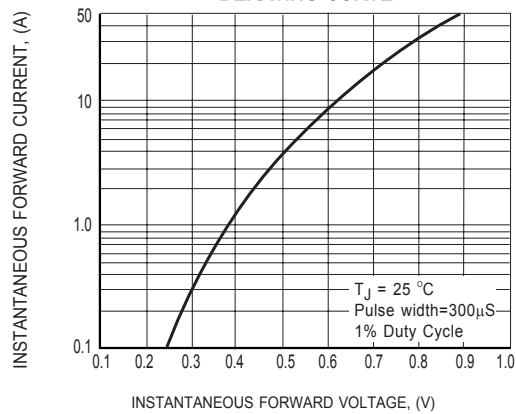


FIG.3 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

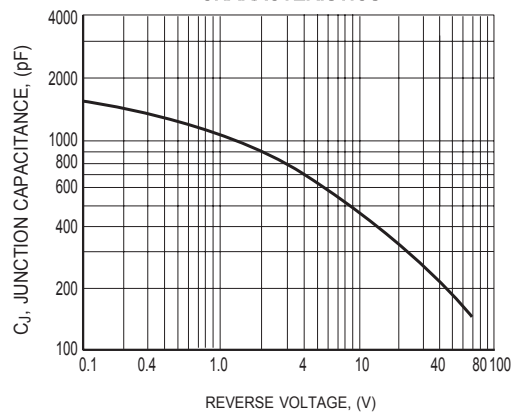


FIG.4 TYPICAL JUNCTION CAPACITANCE

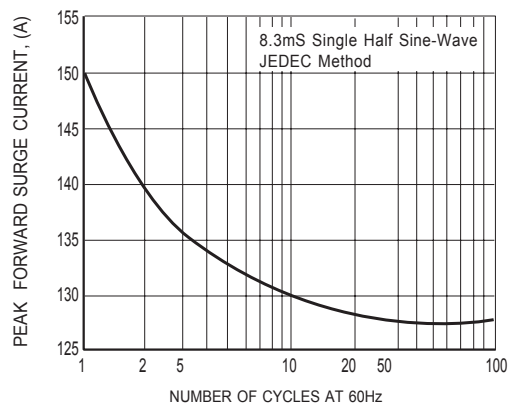


FIG.5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

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