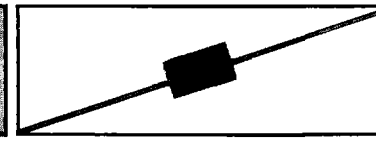
SR850 thru SR856

3 AMPS. SOFT RECOVERY RECTIFIERS



VOLTAGE RANGE
50 to 600 Volts
CURRENT
3.0 Amperes

FEATURES

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with Freon, Alcohol, Chlorothene and similar solvents
- The plastic material carries U/L recognition 94V-O

MECHANICAL DATA

Case: JEDEC DO-201AD molded plastic

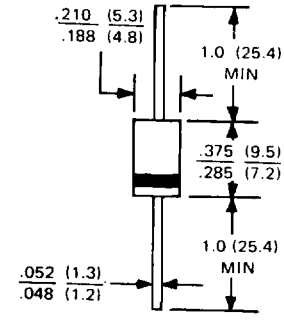
Terminals: Axial leads, solderable per MIL-STD-202, Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.04 ounces, 1.1 grams.

DO-201AD



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

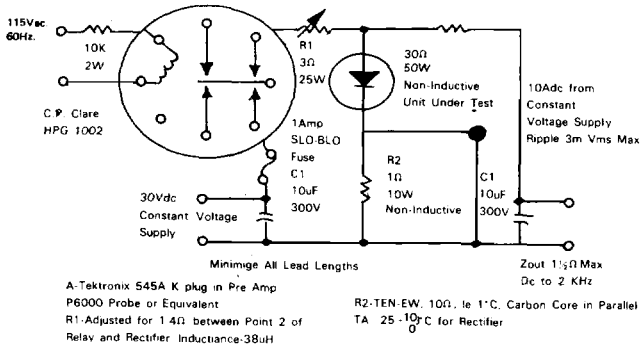
Ratings at 25° C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load,
For capacitive load, derate current by 20%.

		SR850	SR851	SR852	SR854	SR856	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V_{DC}	60	100	200	400	600	V
Maximum Average Forward Rectified Current @ T_A = 90° C	$I_{(AV)}$	3.0					A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	100					A
Maximum Forward Voltage of 3.0A DC T_j = 25° C	V_F	1.25					V
Maximum DC Average Reverse Current at @ T_A = 25° C	I_R	10					uA
Rated DC Blocking Voltage @ T_A = 100° C		200					uA
Maximum Recovery Time (Note 1)	tRR	200					ns
Typical Junction Capacitance (Note 2)	C_J	30					pF
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$	28					°C/W
Operating Temperature Range	T_J	−65 to + 150					°C
Storage Temperature Range	T_{STG}	−65 to + 175					°C

NOTES: 1. Reverse Recovery Test Conditions: I_F = 1 A, V_R = 30V
2. Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC
3. Thermal Resistance Junction to Ambient.

LITEON

Fig. 1– REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



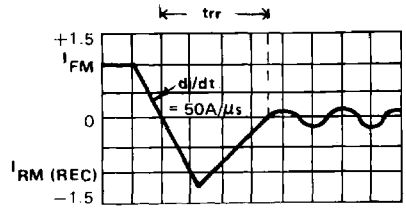


FIG. 2: FORWARD DERATING CURVE

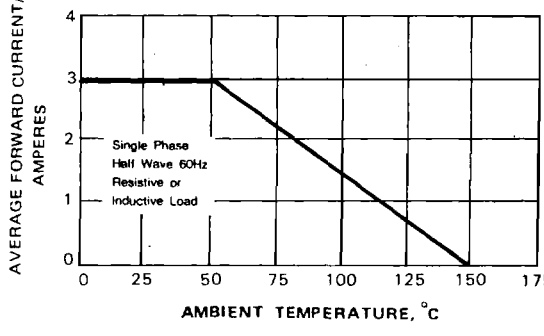


FIG. 3 –PEAK FORWARD SURGE CURRENT

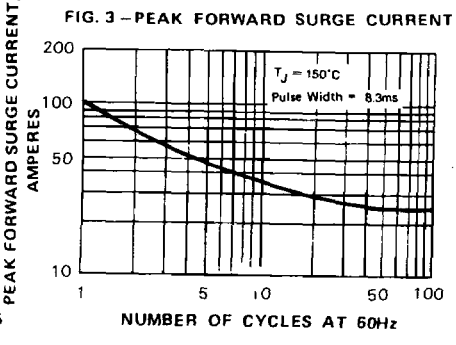


FIG. 4. –TYPICAL REVERSE CHARACTERISTICS

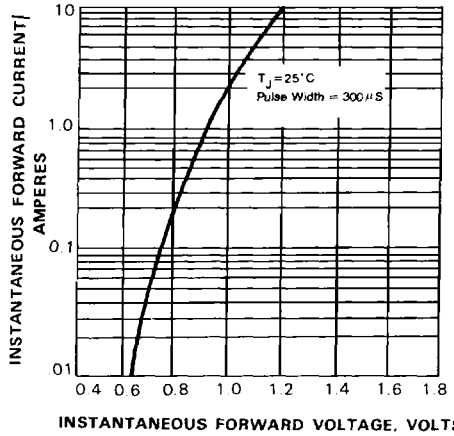


FIG. 5. –TYPICAL JUNCTION CAPACITANCE