SD820S SERIES

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 60 Volts **CURRENT** 8 Amperes

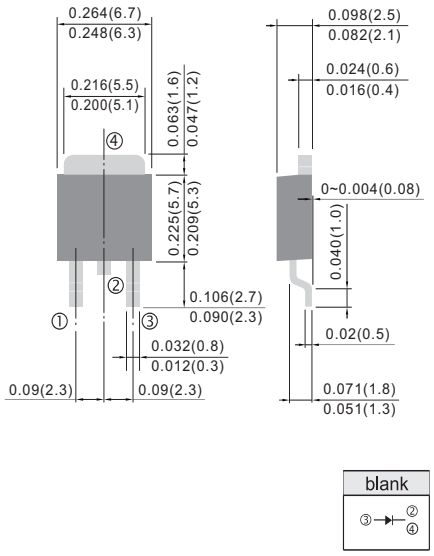
FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: DPAK/TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity: As marking
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0104 ounces, 0.297 grams.

TO-252 / DPAK Unit : inch(mm)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%

PARAMETER	SYMBOL	SD820S	SD830S	SD840S	SD850S	SD860S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	V
Maximum Average Forward Current at T_C =75°C	$I_{F(AV)}$	8					A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	85					A
Maximum Forward Voltage at 8.0A	V_F	0.55			0.75		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T_J=25°C / T_J=100°C	I_R	0.2 20					mA
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	5.0 80					°C / W
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150			°C
Storage Temperature Range	T_{STG}	-55 to +150					°C

SD820S SERIES

RATING AND CHARACTERISTIC CURVES

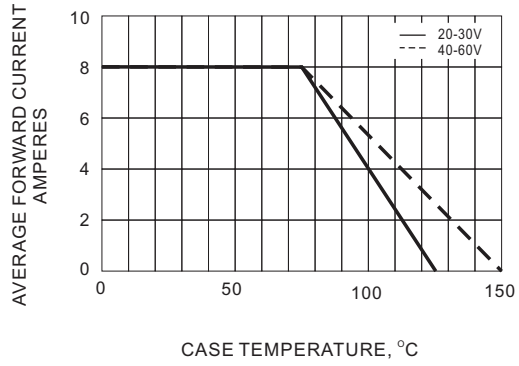


Fig. 1–FORWARD CURRENT DERATING CURVE

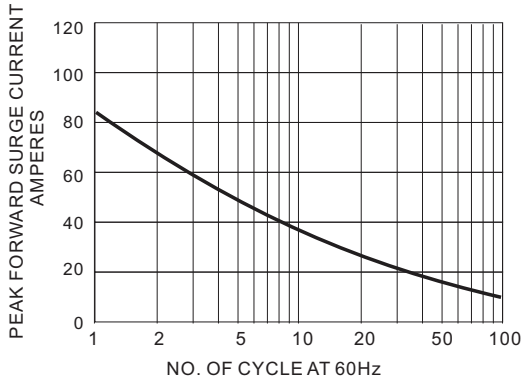


Fig. 2–MAXIMUM NON-REPETITIVE SURGE CURRENT

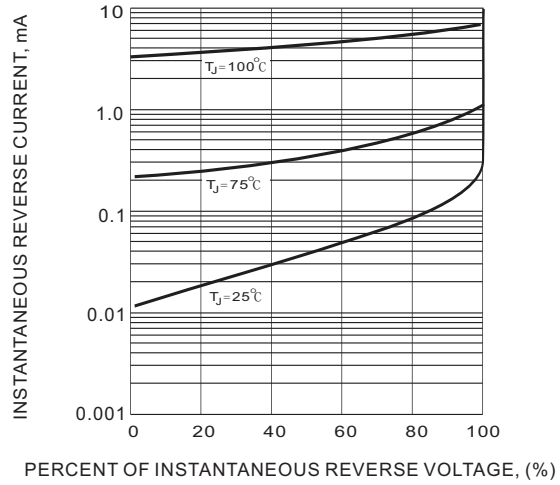


Fig. 3–TYPICAL REVERSE CHARACTERISTIC

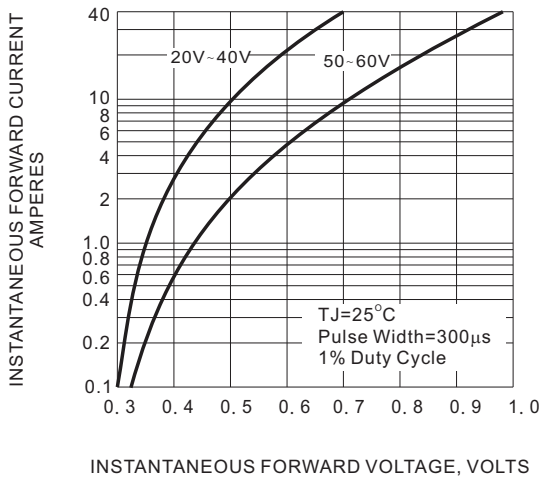
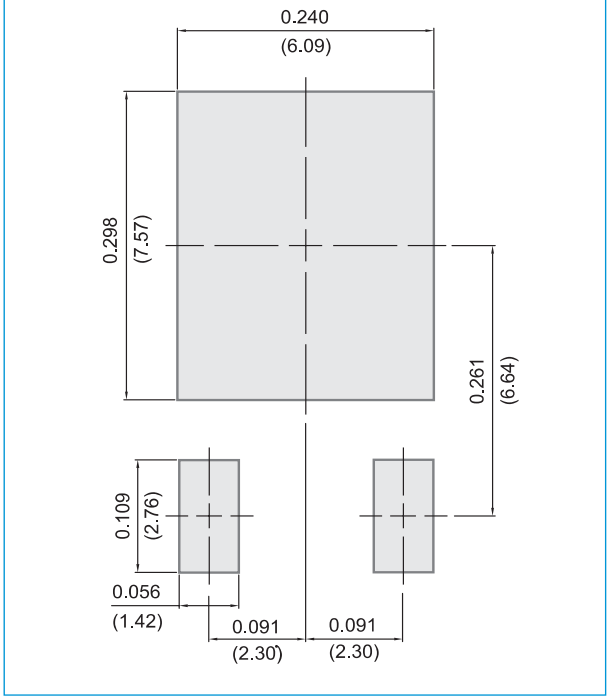


Fig. 4–TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

SD820S SERIES

MOUNTING PAD LAYOUT

TO-252 Unit: inch (mm)



ORDER INFORMATION

- Packing information

  T/R - 3K per 13" plastic Reel

LEGAL STATEMENT

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