

DATA SHEET

SD820S~SD8150S

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 150 Volts **CURRENT** 8 Amperes

TO-252 / DPAK

Unit : inch (mm)

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
- Pb free product are available : 99% Sn above can meet Rohs environment substance directive request

MECHANICAL DATA

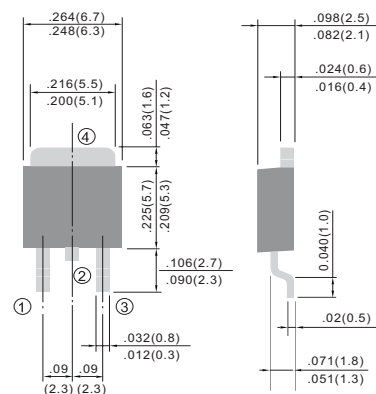
Case: D PAK/TO-252 molded plastic

Terminals: Solder plated, solderable per MIL-STD-202G, Method 208

Polarity: As marking

Standard packaging: 16mm tape (EIA-481)

Weight: 0.015 ounces, 0.4grams.



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	SD880S	SD8100S	SD8150S	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	V
Maximum Average Forward Current .375"(9.5mm) lead length at Tc =85°C	I _{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		0.85		0.92	V
Maximum DC Reverse Current TJ=25°C at Rated DC Blocking Voltage TJ=100°C	I _R	0.5 20								mA
Typical Thermal Resistance	RθJC	5								°C / W
Operating Junction Temperature Rang	T _J	-50 to +125								°C
Storage Temperature Rang	T _J ,T _{STG}	-50 to +150								°C

RATING AND CHARACTERISTIC CURVES

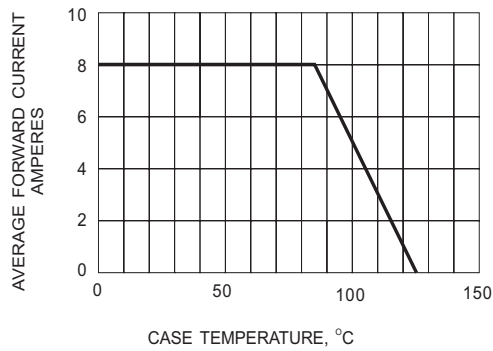


Fig.1- FORWARD CURRENT DERATING CURVE

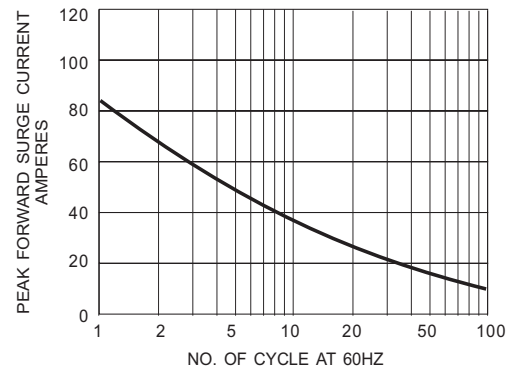


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

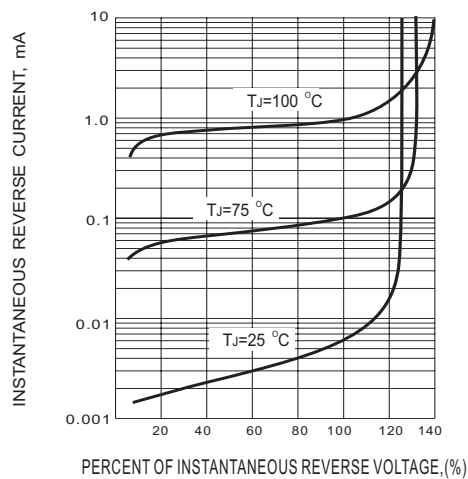


Fig.3- TYPICAL REVERSE CHARACTERISTICS

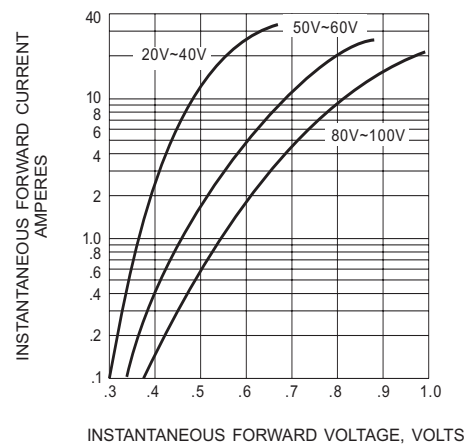


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS