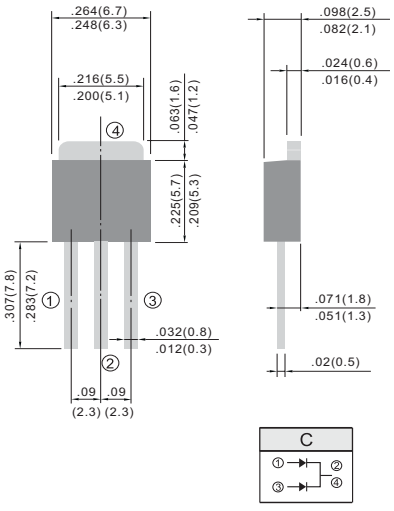
SD820CT~SD8150CT

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

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

TO-251AB 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

MECHANICALDATA

Case: D PAK/TO-251AB 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	SD820CT	SD830CT	SD840CT	SD850CT	SD860CT	SD880CT	SD8100CT	SD8150CT	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 4.0A (Note 1)	V_F	0.55			0.75		0.85		0.92	V
Maximum DC Reverse Current Tc=25°C at Rated DC Blocking Voltage Tc=100°C	I_R	0.2 20								mA
Typical Thermal Resistance	RθJC	80								°C / W
Operating Junction Temperature Rang	T_J	-50 to +125								°C
Storage Temperature Rang	T_J,T_{STG}	-50 to +150								°C

Notes :

1. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES

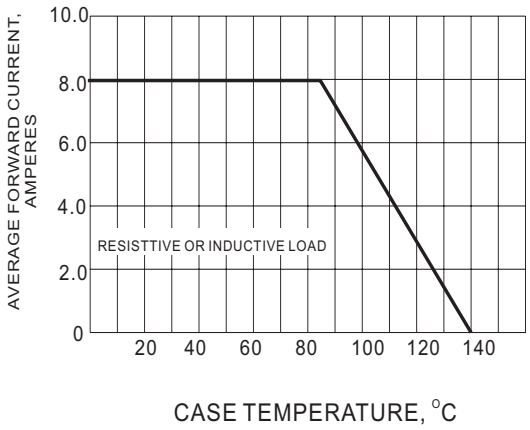


Fig.1- FORWARD CURRENT DERATING CURVE

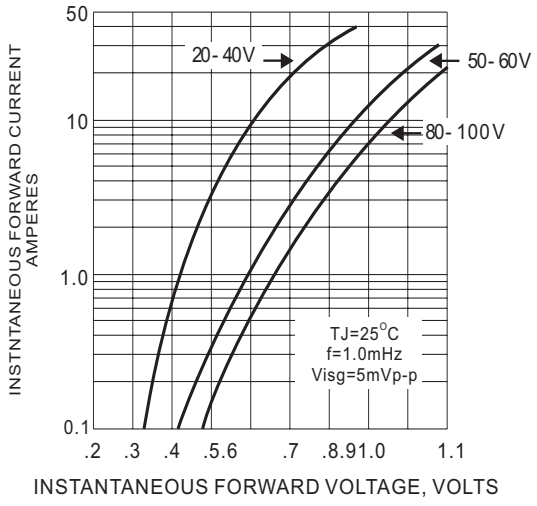


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

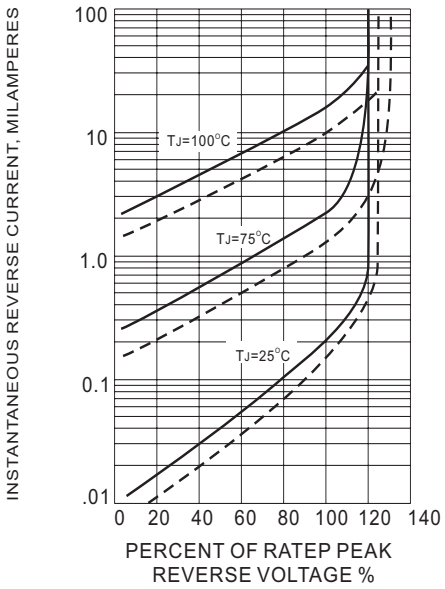


Fig.3- TYPICAL REVERSE CHARACTERISTICS

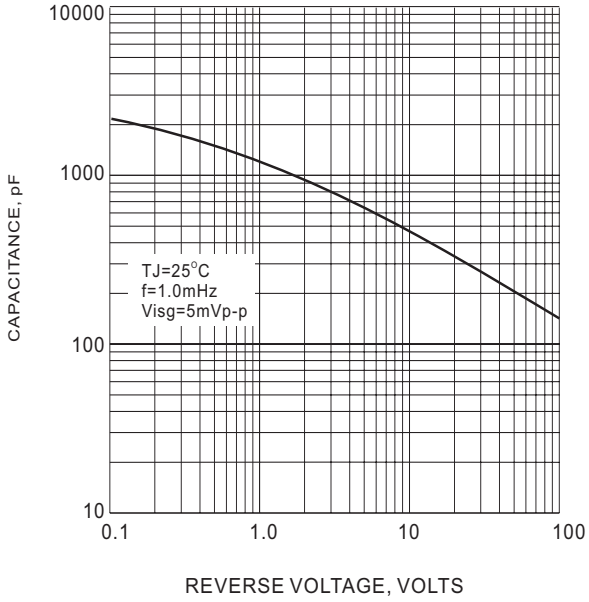


Fig.4- TYPICAL JUNCTION CAPACITANCE

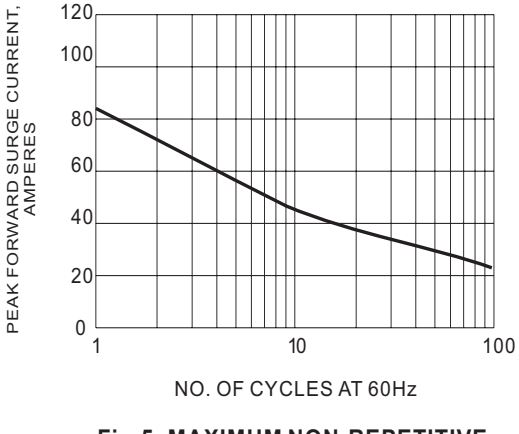


Fig.5- MAXIMUM NON-REPETITIVE SURGE CURRENT