SD820CT 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: TO-251AB 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-251AB Unit : inch(mm)
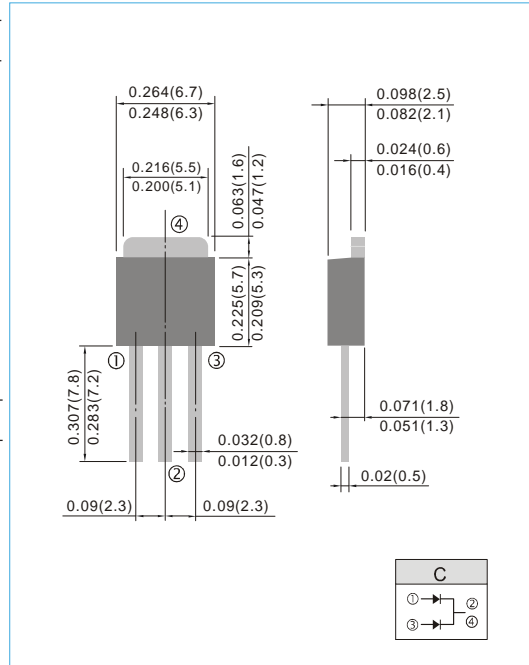
MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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	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℃	$I_{F(AV)}$	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 4.0A	V_F	0.55			0.75		V
Maximum DC Reverse Current at T_J=25℃ Rated DC Blocking Voltage T_J=100℃	I_R	0.2 20					mA
Typical Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	5.0 80					℃ / W
Operating Junction Temperature Range	T_J	-55 to +125		-55 to +150			℃
Storage Temperature Range	T_{STG}	-55 to +150					℃

SD820CT SERIES

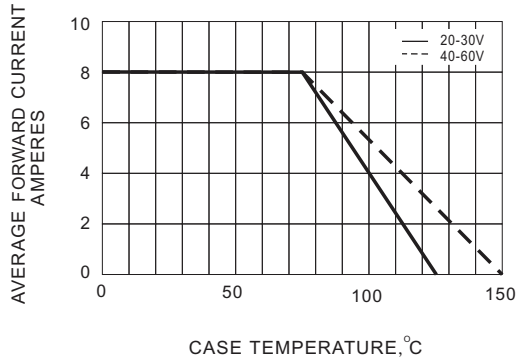## RATING AND CHARACTERISTIC CURVES

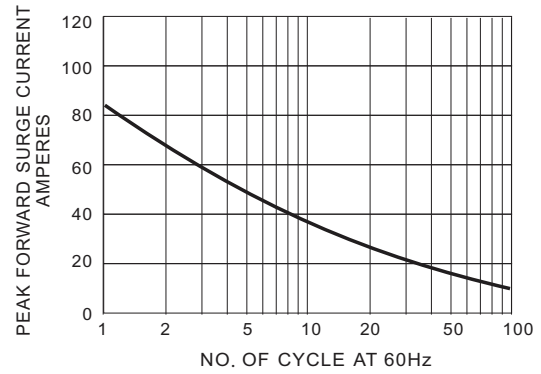Fig.1-FORWARD CURRENT DERATING CURVE

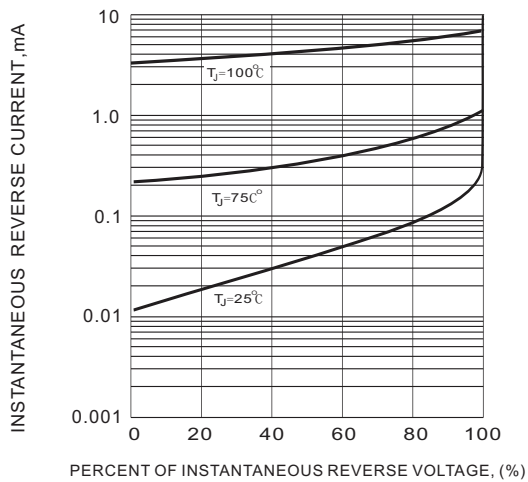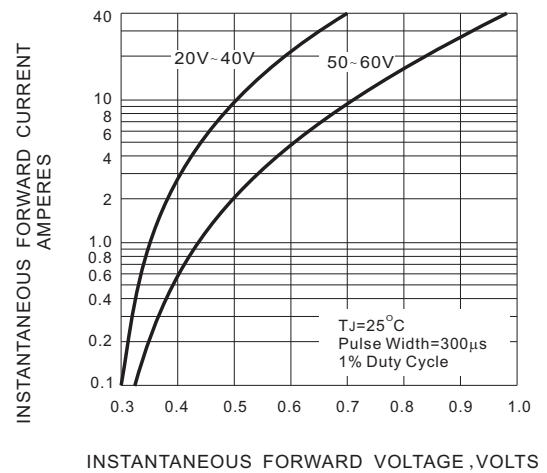Fig. 2-MAXIMUM NON-REPETITIVE SURGE CURRENT

Fig. 3-TYPICAL REVERSE CHARACTERISTIC

Fig. 4-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC