



# DATA SHEET

## SD820YT~SD8150YT

### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

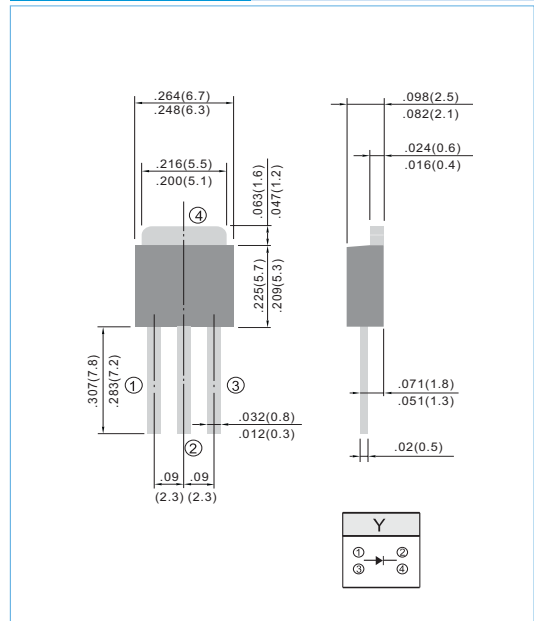
<b>VOLTAGE</b>	<b>20 to 150 Volts</b>	<b>CURRENT</b>	<b>8 Amperes</b>	<b>TO-251AB</b>	<b>Unit : inch (mm)</b>
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#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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-251AB molded plastic  
 Terminals: Solder plated, solderable per MIL-STD-202G, Method 2026  
 Polarity: As marking  
 Standard packaging: 16mm tape (EIA-481)  
 Weight: 0.015 ounces, 0.4grams.



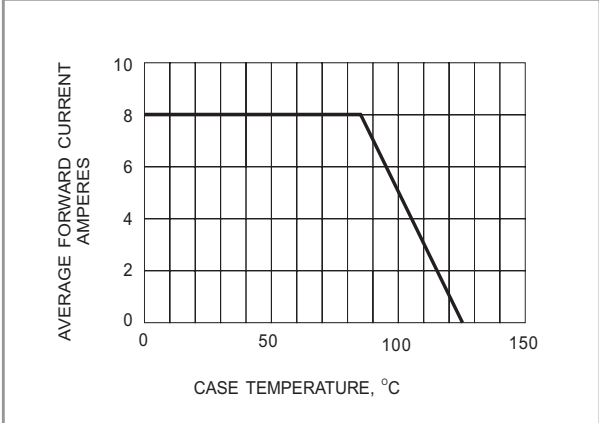
#### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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%

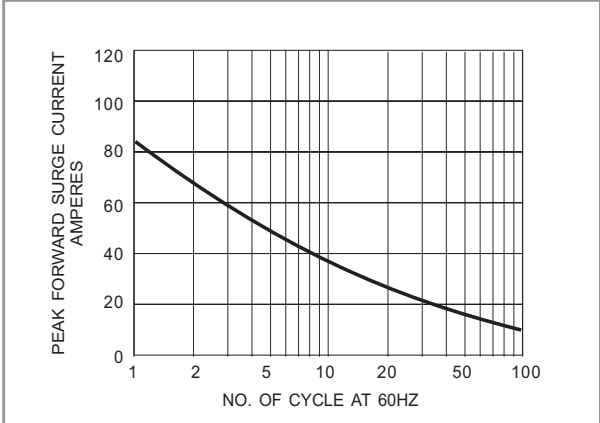
PARAMETER	SYMBOL	SD820YT	SD830YT	SD840YT	SD850YT	SD860YT	SD880YT	SD8100YT	SD8150YT	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	$V_{DC}$	20	30	40	50	60	80	100	150	V
Maximum Average Forward Current .375"(9.5mm) lead length at $T_c = 85^\circ C$	$I_{AV}$	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 $T_J = 25^\circ C$ at Rated DC Blocking Voltage $T_J = 100^\circ C$	$I_R$	0.5 20								mA
Typical Thermal Resistance	$R_{\theta JC}$	5								$^\circ C / W$
Operating Junction Temperature Rang	$T_J$	-50 to +125								$^\circ C$
Storage Temperature Rang	$T_J, T_{STG}$	-50 to +150								$^\circ C$



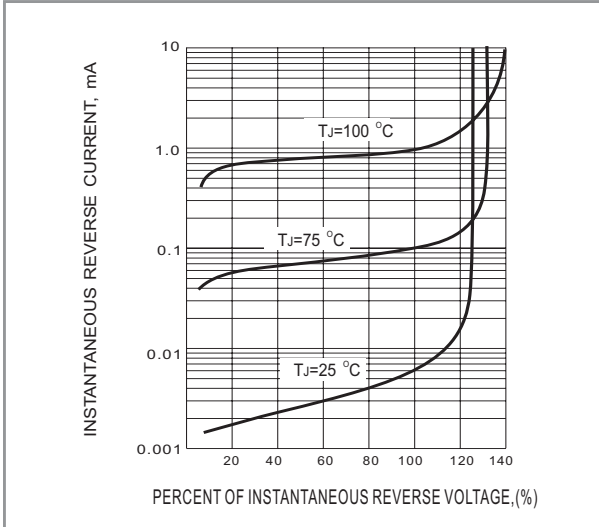
**RATING AND CHARACTERISTIC CURVES**



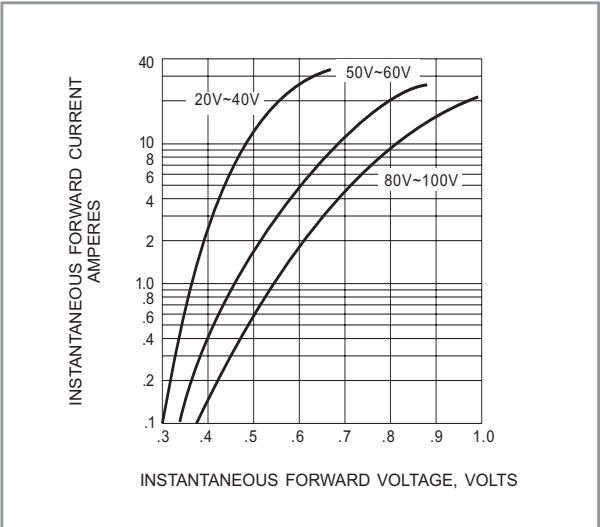
**Fig.1- FORWARD CURRENT DERATING CURVE**



**Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT**



**Fig.3- TYPICAL REVERSE CHARACTERISTICS**



**Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**