



# SD520YT~SD560YT

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

**VOLTAGE** 20 to 60 Volts    **CURRENT** 5 Amperes

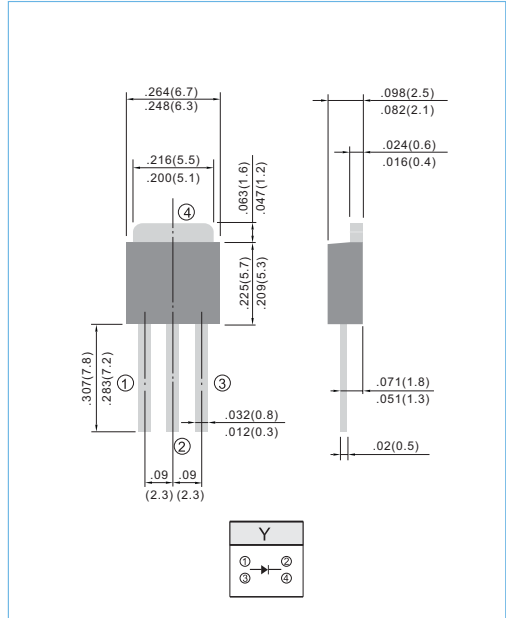
TO-251AB    Unit : inch (mm)

### 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
- 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
- Weight: 0.0104 ounces, 0.297 grams.



### 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	SD520YT	SD530YT	SD540YT	SD550YT	SD560YT	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 Rectified Current at $T_c = 75^\circ C$	$I_{F(AV)}$	5.0					A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	100					A
Maximum Forward Voltage at 5.0A	$V_F$	0.55		0.75		V	
Maximum DC Reverse Current $T_j = 25^\circ C$ at Rated DC Blocking Voltage $T_j = 100^\circ C$	$I_R$	0.2 20		0.1 20		mA	
Typical Thermal Resistance	$R_{\theta JC}$	5.0					$^\circ C / W$
Operating Junction Temperature Range	$T_J$	-55 to +125		-55 to +150		$^\circ C$	
Storage Temperature Range	$T_{STG}$	-55 to +150					$^\circ C$



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## RATING AND CHARACTERISTIC CURVES

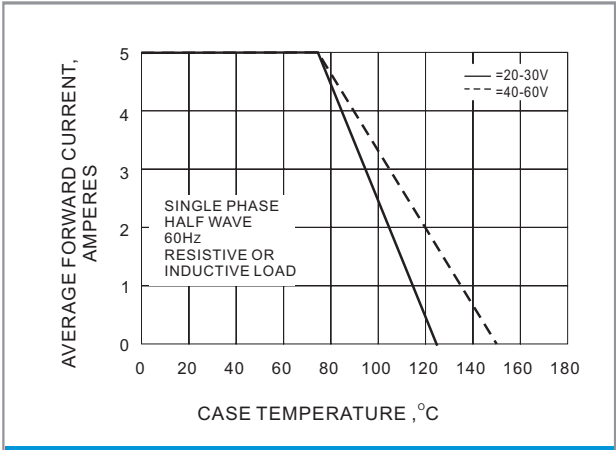


Fig. 1- FORWARD CURRENT DERATING CURVE

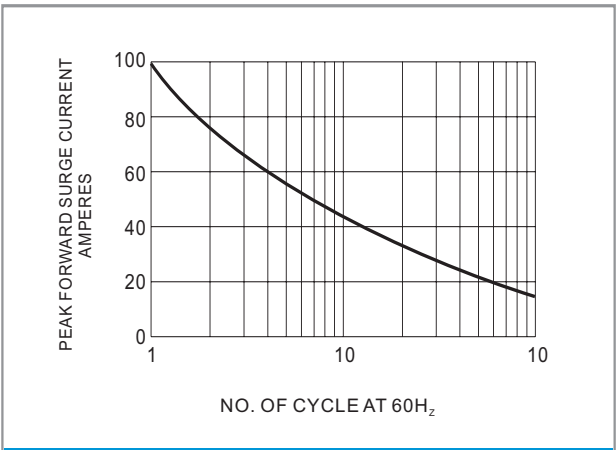


Fig. 2 - MAXIMUM NON-REPETITIVE SURGE CURRENT

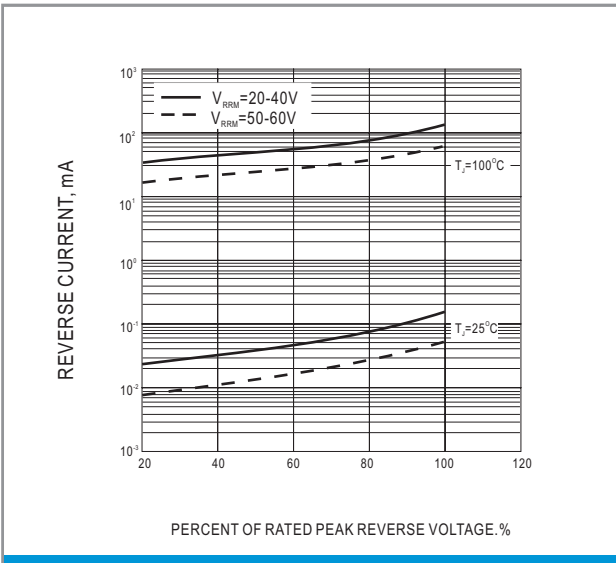


Fig. 3-TYPICAL REVERSE CHARACTERISTIC

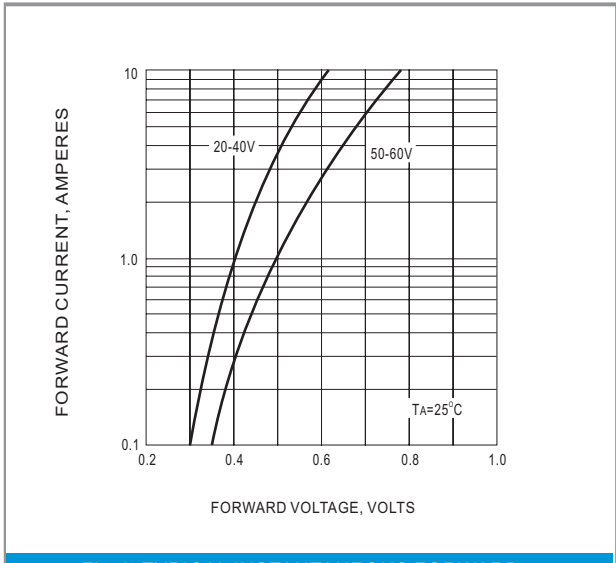


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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