



DATA SHEET

SD520S~SD5100S

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts **CURRENT** 5 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

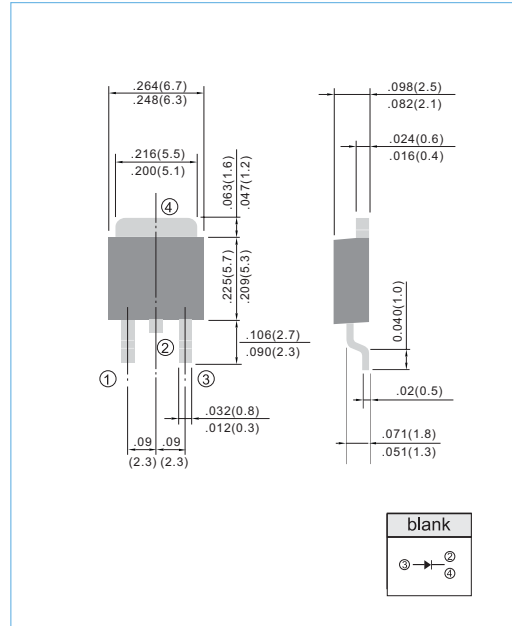
MECHANICAL DATA

Case: TO-252 molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: As marking

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	SD520S	SD530S	SD540S	SD550S	SD560S	SD580S	SD5100S	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current .375"(9.5mm) lead length at $T_c = 75^\circ C$	I_{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		0.85		V	
Maximum DC Reverse Current $T_c = 25^\circ C$ at Rated DC Blocking Voltage $T_c = 100^\circ C$	I_R	0.2 20							mA
Maximum Thermal Resistance	$R_{\theta JC}$	5.0							$^\circ C / W$
Operating Junction Temperature Range	T_J	-50 to +125							$^\circ C$
Storage Temperature Range	T_{STG}	-65 to +150							$^\circ C$



RATING AND CHARACTERISTIC CURVES

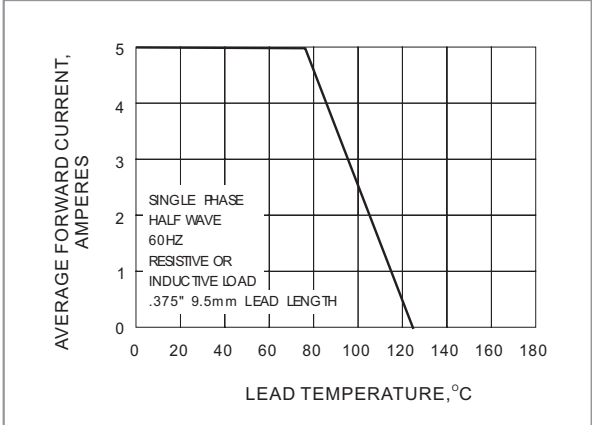


Fig. 1- FORWARD CURRENT DERATING CURVE

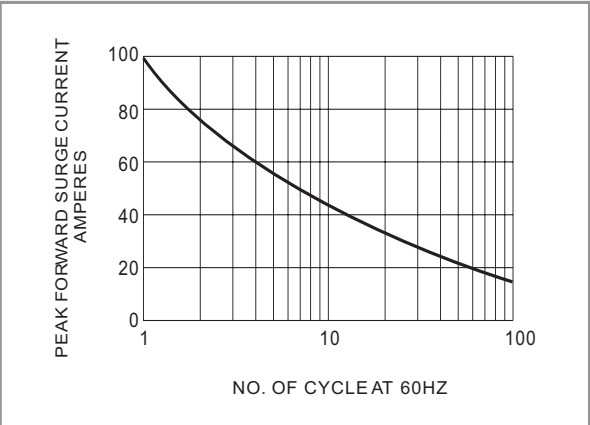


Fig. 2- MAXIMUM NON-REPETITIVE SURGE CURRENT

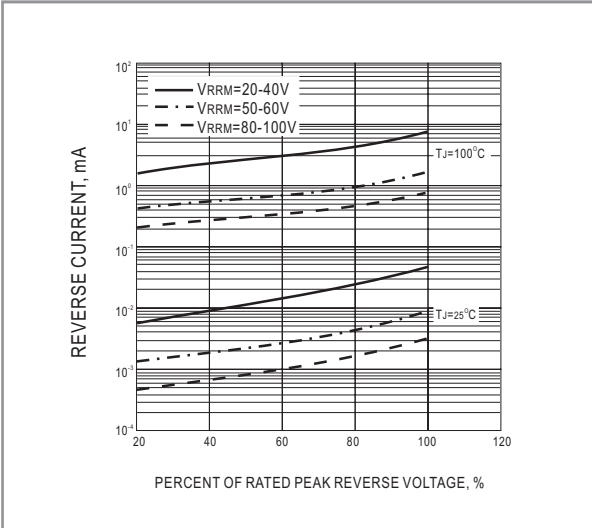


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

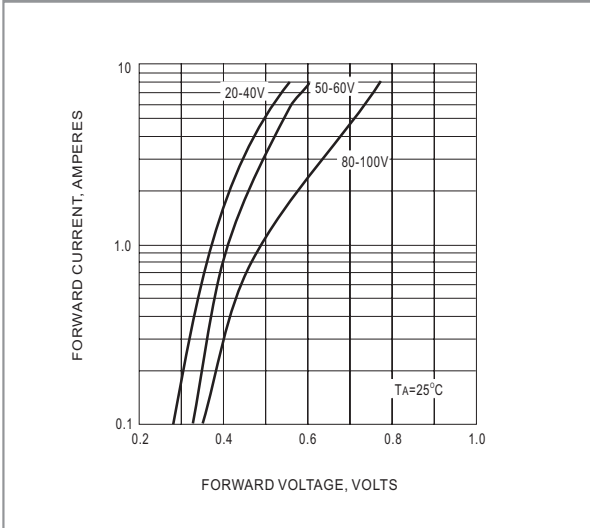


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC