



DATA SHEET

SD320S~SD3100S

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 100 Volts **CURRENT** 3.0 Ampere

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

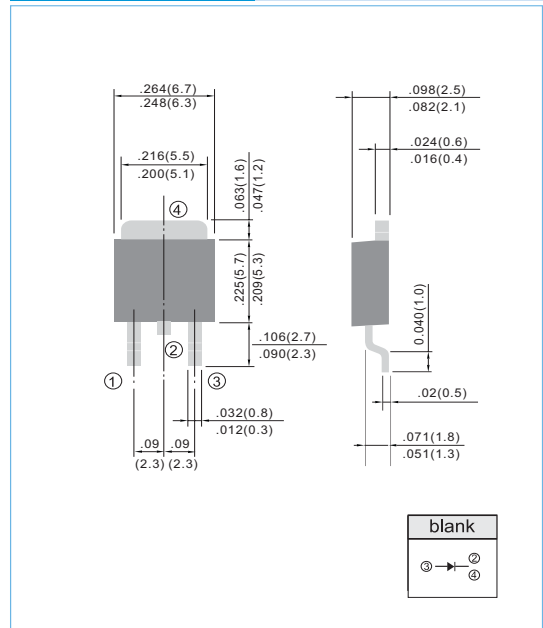
MECHANICAL DATA

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	SD320S	SD330S	SD340S	SD350S	SD360S	SD380S	SD3100S	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 $T_C=75^\circ\text{C}$	I_{AV}	3.0							A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	75							A	
Maximum Forward Voltage at 3.0A	V_F	0.50			0.64		0.85		V	
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_C=25^\circ\text{C}$ Maximum DC Reverse Current at Rated DC Blocking Voltage $T_C=100^\circ\text{C}$	I_R					0.2 20			mA	
Maximum Thermal Resistance	$R_{\theta JC}$	5.0								$^\circ\text{C} / \text{W}$
Operating Junction Temperature Rang	T_J	-50 to +125							$^\circ\text{C}$	
Storage Temperature Rang	T_{STG}	-65 to +150							$^\circ\text{C}$	



RATING AND CHARACTERISTIC CURVES

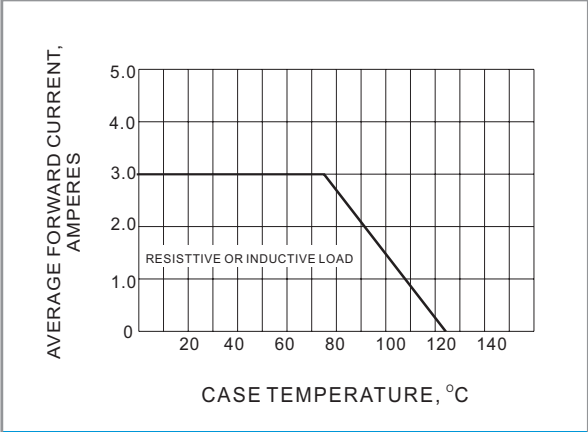


Fig.1- FORWARD CURRENT DERATING CURVE

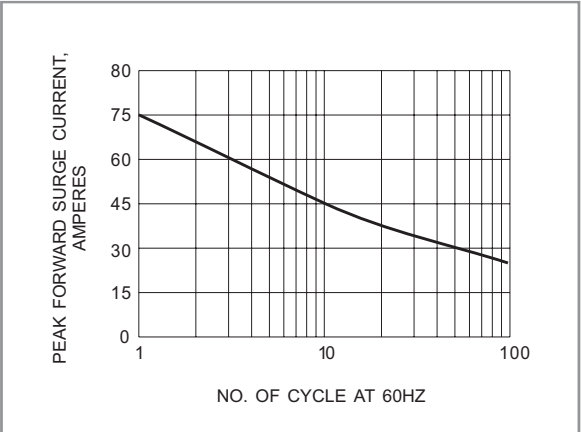


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

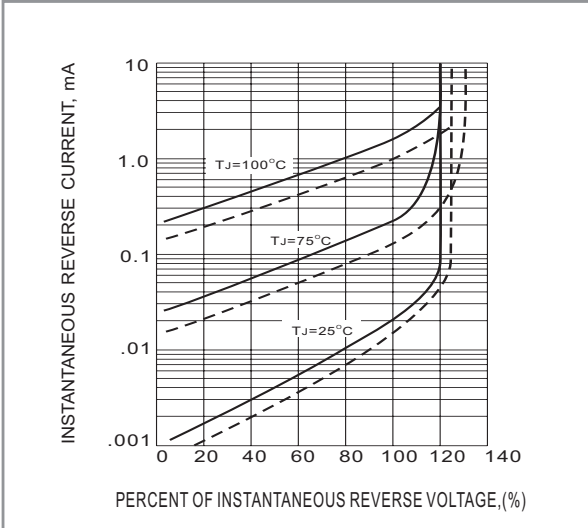


Fig.3- TYPICAL REVERSE CHARACTERISTICS

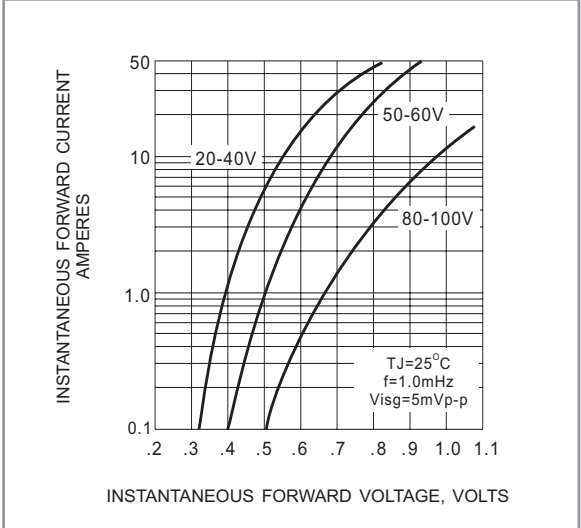


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS