



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

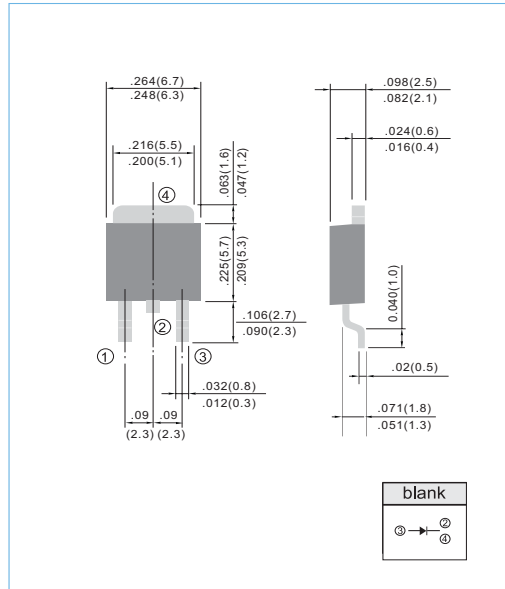
MECHANICAL DATA

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°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°C Maximum DC Reverse Current at Rated DC Blocking Voltage T _C =100°C	I _R					0.2 20		mA	
Maximum Thermal Resistance	R _{θJC}					5.0		°C / W	
Operating Junction Temperature Rang	T _J					-50 to +125		°C	
Storage Temperature Rang	T _{STG}					-65 to +150		°C	



RATING AND CHARACTERISTIC CURVES

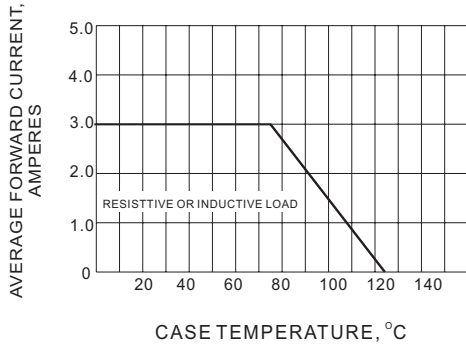


Fig.1- FORWARD CURRENT DERATING CURVE

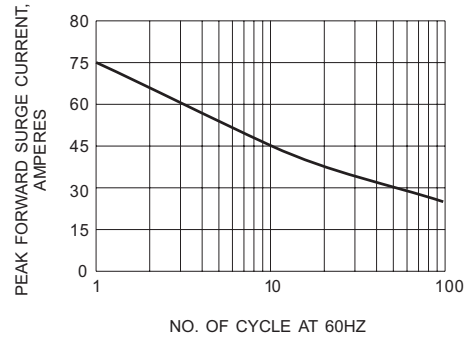


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

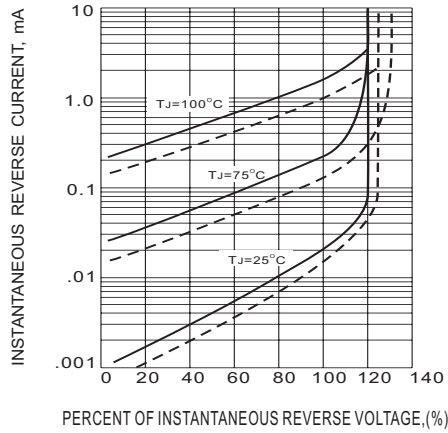


Fig.3- TYPICAL REVERSE CHARACTERISTICS

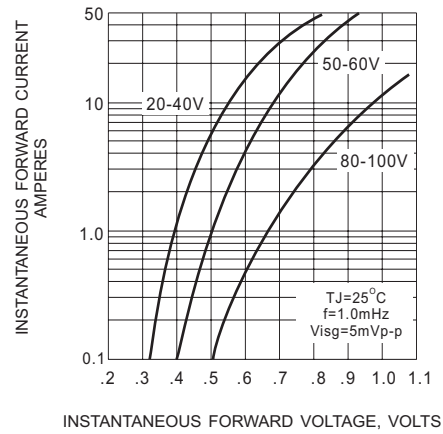


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS