



# SD320YS~SD360YS

## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

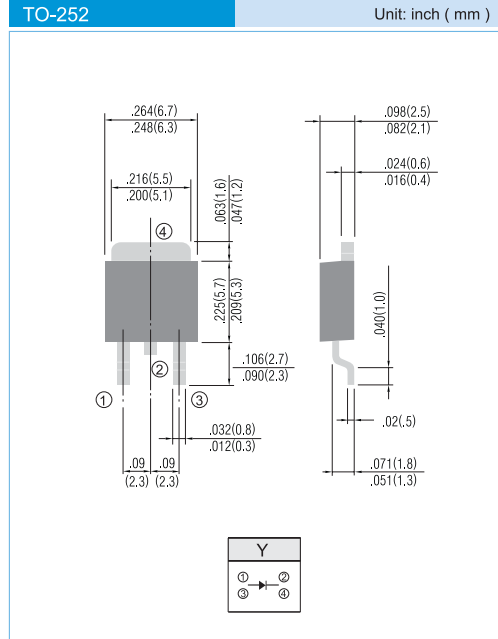
**VOLTAGE** 20 to 60 Volts **CURRENT** 3.0 Ampere

### 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
- In compliance with EU RoHS 2002/95/EC directives

### MECHANICAL DATA

- Case: TO-252 molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297grams.



### 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	SD320YS	SD330YS	SD340YS	SD350YS	SD360YS	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 $T_c = 75^\circ\text{C}$	$I_{F(AV)}$	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 $I_F = 3.0\text{A}$ (Note 1)	$V_F$	0.50			0.64		V
Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 25^\circ\text{C}$ Maximum DC Reverse Current at Rated DC Blocking Voltage $T_J = 100^\circ\text{C}$	$I_R$	0.2 20			0.1 20		mA
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.0					$^\circ\text{C} / \text{W}$
Operating Junction and Storage Temperature Rang	$T_J, T_{STG}$	-55 to +125			-55 to +150		$^\circ\text{C}$

**NOTES:**

1. Pulse Test with PW =300µsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8.0mm<sup>2</sup> (.013mm thick) copper pad areas.



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## RATING AND CHARACTERISTIC CURVES

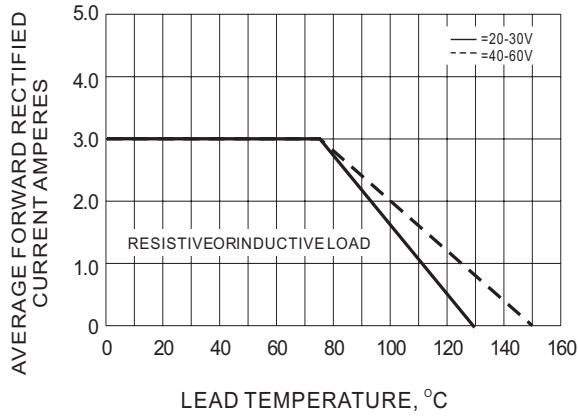


Fig.1- FORWARD CURRENT DERATING CURVE

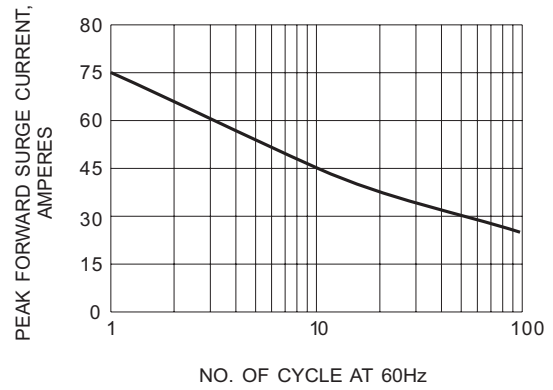


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

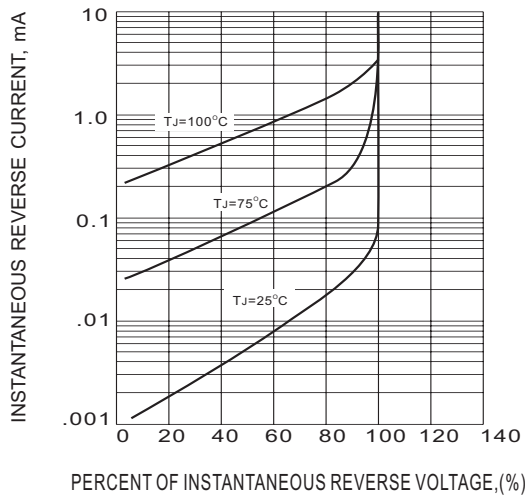


Fig.3- TYPICAL REVERSE CHARACTERISTICS

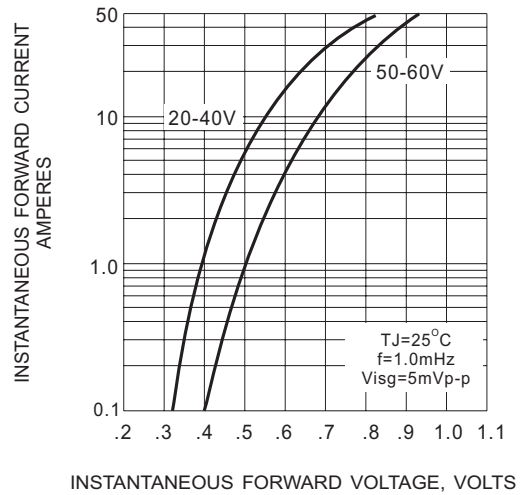


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS