



# DATA SHEET

## SD320S~SD3100S

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS**  
**VOLTAGE 20 to 100 Volts CURRENT - 3 Ampere**

TO-252 / DPAK

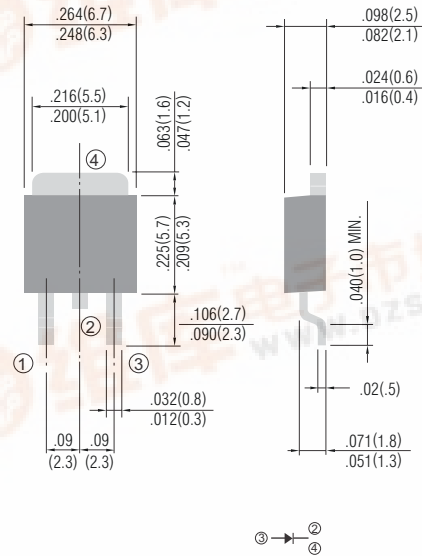
Unit: inch ( mm )

### 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
- High temperature soldering guaranteed:260°CXC/10 seconds at terminals

### MECHANICAL DATA

Case: D PAK/TO-252 molded plastic  
Terminals: Solder plated, solderable per MIL-STD-750,Method 2026  
Polarity: As marking  
Standard packaging: 16mm tape (EIA-481)  
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%

	SD320S	SD330S	SD340S	SD350S	SD360S	SD380S	SD3100S	UNITS
Maximum Recurrent Peak Reverse Voltage	20	30	40	50	60	80	100	V
Maximum RMS Voltage	14	21	28	35	42	56	70	V
Maximum DC Blocking Voltage	20	30	40	50	60	80	100	V
Maximum Average Forward Rectified Current at Tc=75°C	3							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	75							A
Maximum Instantaneous Forward Voltage at 3.0A (Note 1)	0.50		0.64		0.85			V
Maximum DC Reverse Current at Tc=25°C DC Blocking Voltage per element Tc=100°C				0.2 20				mA
Maximum Thermal Resistance (Note 2)	80							°C/W
Operating and Storage Temperature Range	-55 to +125							°C
Storage Temperature Range	-65 to +150							°C

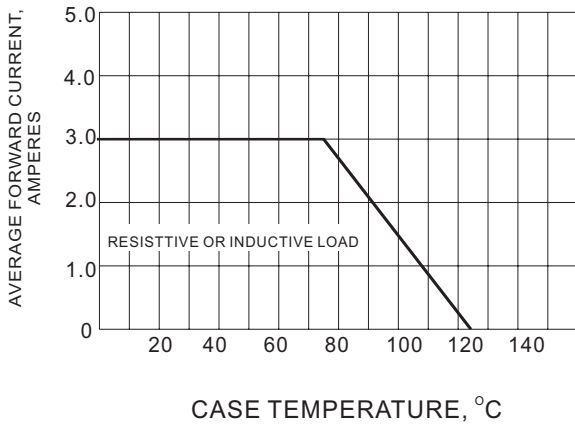
NOTES:

1 Thermal Resistance Junction to Ambient .

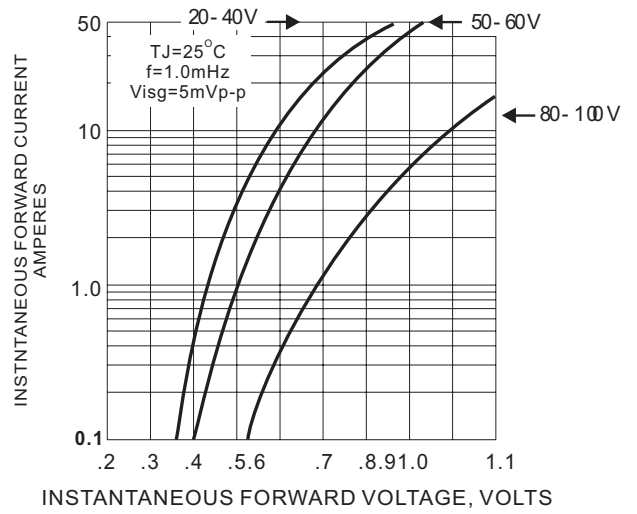




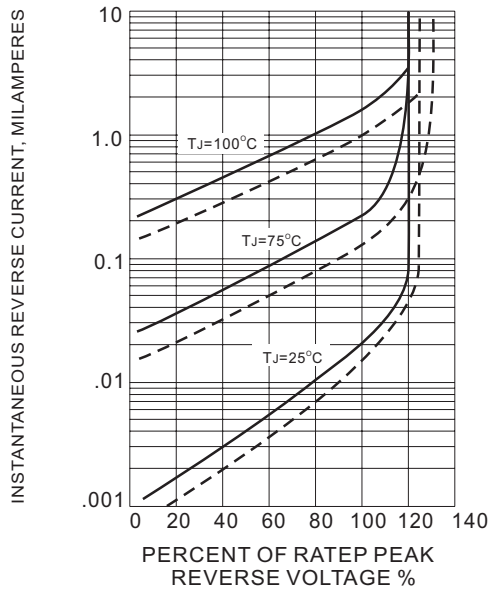
**RATING AND CHARACTERISTIC CURVES**



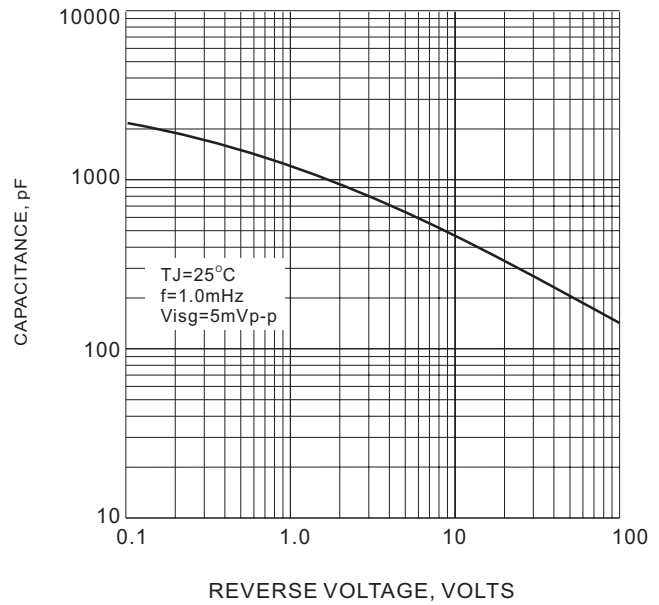
**Fig.1- FORWARD CURRENT DERATING CURVE**



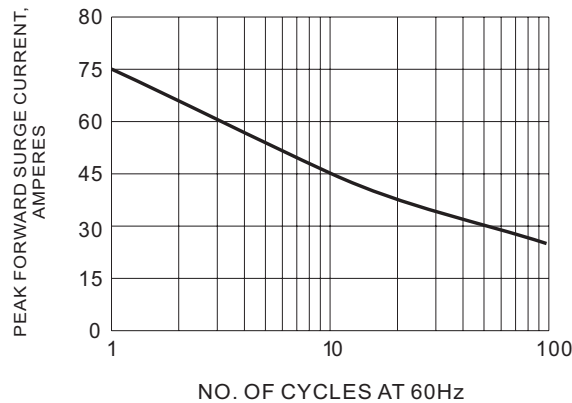
**Fig.2- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC**



**Fig.3- TYPICAL REVERSE CHARACTERISTICS**



**Fig.4- TYPICAL JUNCTION CAPACITANCE**



**Fig.5- MAXIMUM NON-REPETITIVE SURGE CURRENT**