



DATA SHEET

SD820YS~SD8100YS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

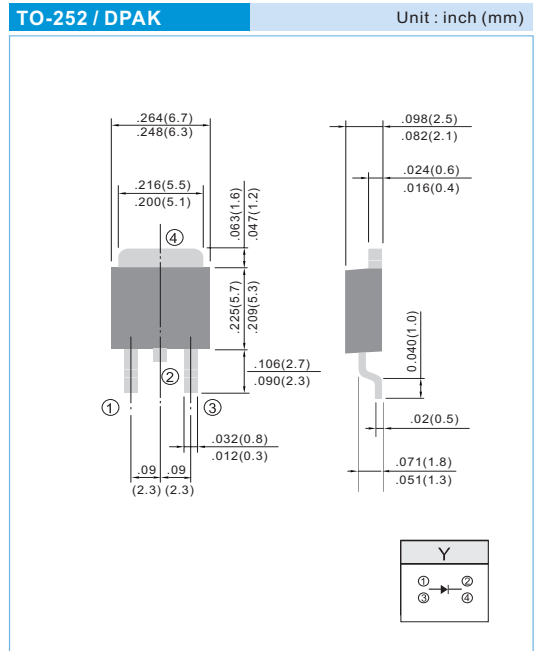
VOLTAGE	20 to 100 Volts	CURRENT	8 Ampere	TO-252 / DPAK	Unit : inch (mm)
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FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- 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: 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%

PARAMETER	SYMBOL	SD820YS	SD830YS	SD840YS	SD850YS	SD860YS	SD880YS	SD8100YS	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 Current .375"(9.5mm) lead length at T _c =85°C	I _{AV}	8							A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	85							A
Maximum Forward Voltage at 8.0A	V _F	0.55		0.75		0.85		V	
Maximum DC Reverse Current T _J =25°C at Rated DC Blocking Voltage T _J =100°C	I _R	0.5 20							mA
Typical Thermal Resistance	R _{θJC}	5							°C / W
Operating Junction Temperature Rang	T _J	-50 to +125							°C
Storage Temperature Rang	T _J , T _{STG}	-50 to +150							°C



RATING AND CHARACTERISTIC CURVES

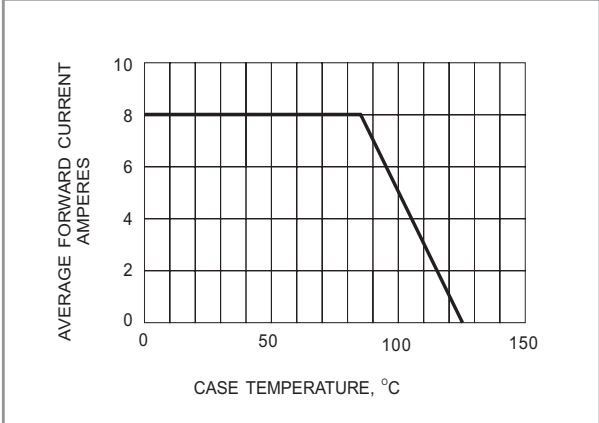


Fig.1- FORWARD CURRENT DERATING CURVE

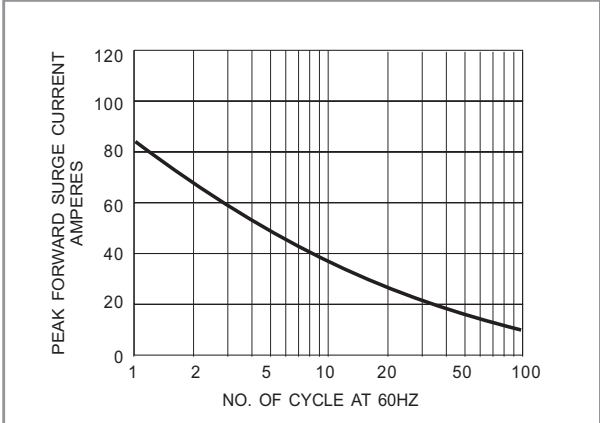


Fig.2- MAXIMUM NON-REPETITIVE SURGE CURRENT

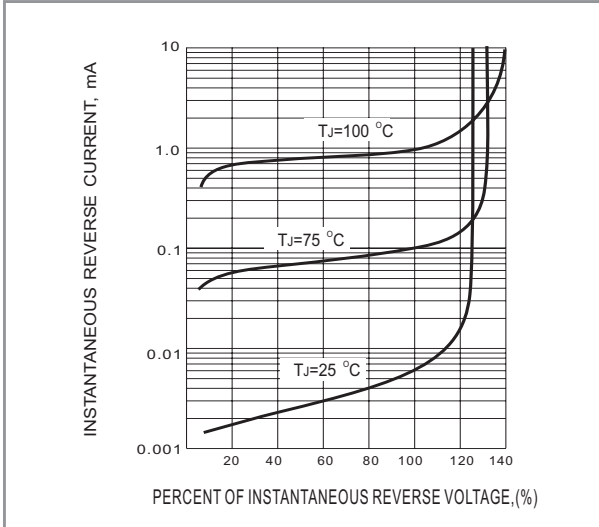


Fig.3- TYPICAL REVERSE CHARACTERISTICS

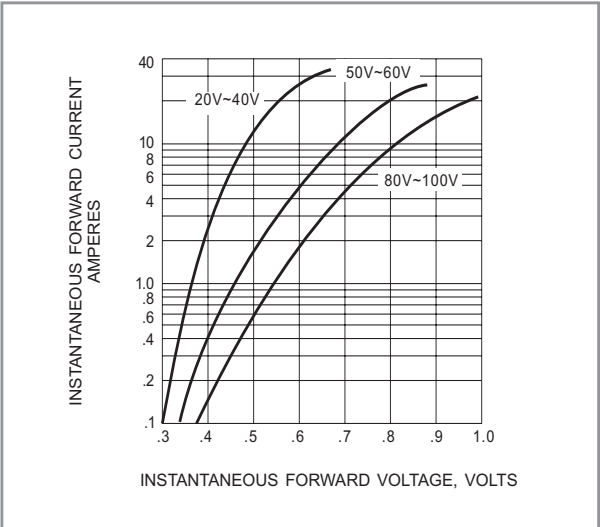


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS