



DATA SHEET

SD1020CS~SD10150CS

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 20 to 150 Volts **CURRENT** 10.0 Amperes **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
- Pb free product are available : 99% Sn above can meet Rohs environment substance diective request

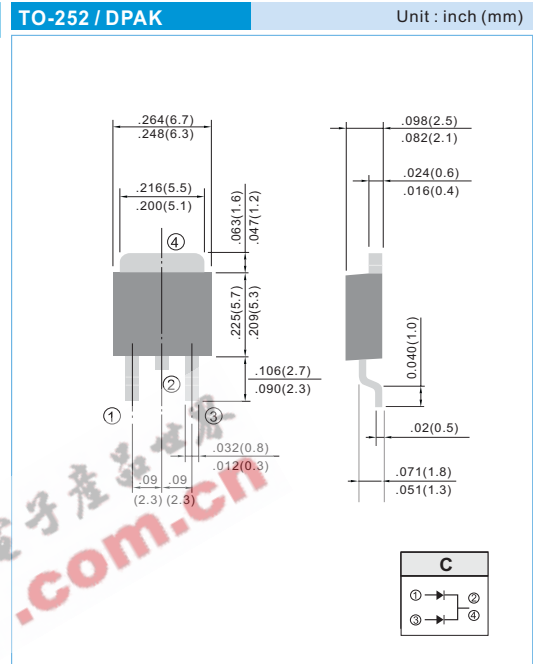
MECHANICAL DATA

Case: TO-252 molded plastic

Terminals: Solder plated, solderable per MIL-STD-202G, Method 208

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	SD1020CS	SD1030CS	SD1040CS	SD1050CS	SD1060CS	SD1080CS	SD10100CS	SD10150CS	UNITS
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	V
Maximum Average Forward Rectified Current .375" (9.5mm) lead length at $T_c=100^\circ\text{C}$	I_{AV}	10.0								A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	100								A
Maximum Instantaneous Forward Voltage at 5.0A per leg	V_F	0.55		0.75		0.85		0.92		V
Maximum DC Reverse Current $T_A=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_A=100^\circ\text{C}$	I_R	0.2 20								mA
Maximum Thermal Resistance	$R_{\theta JC}$ $R_{\theta JA}$	3.0 80								$^\circ\text{C} / \text{W}$
Operating Junction Temperature Range	T_J	-50 to +125								$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-50 to +150								$^\circ\text{C}$

NOTES:

1. Both Bonding and Chip structure are available.



RATING AND CHARACTERISTIC CURVES

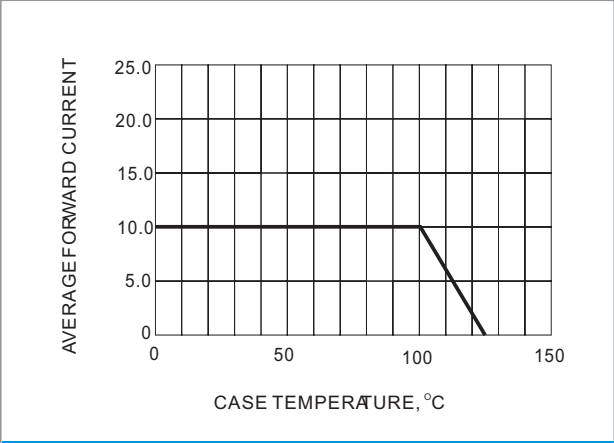


Fig. 1- FORWARD CURRENT DERATING CURVE

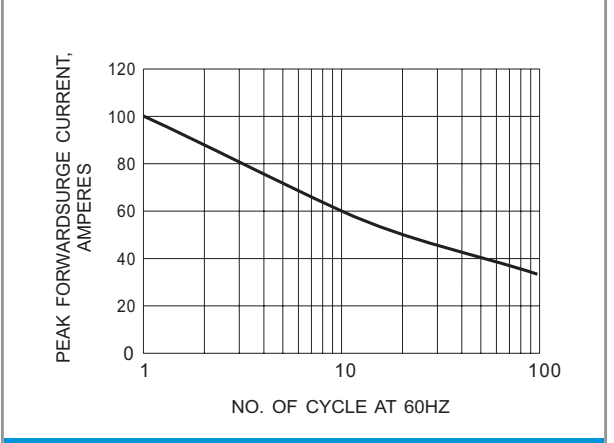


Fig. 2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

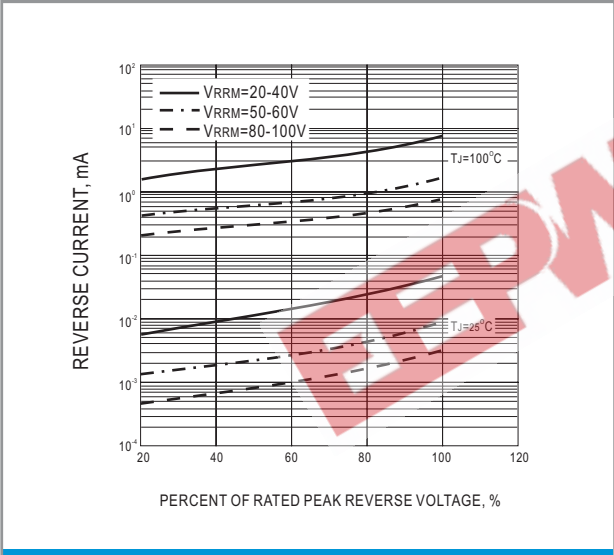


Fig. 3- TYPICAL REVERSE CHARACTERISTIC

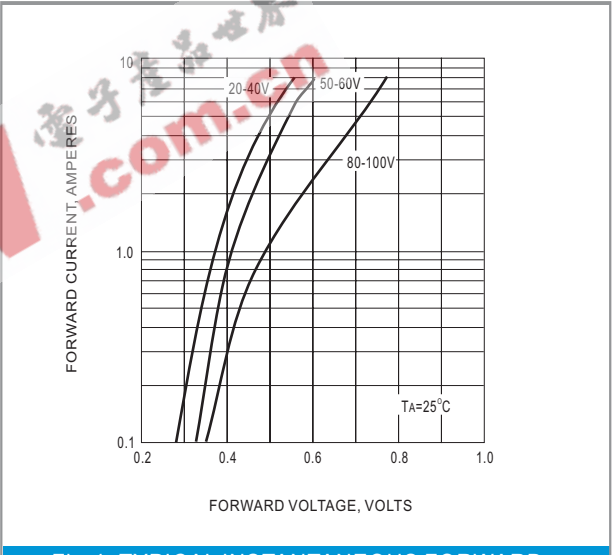


Fig. 4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC