



## SD1020CS~SD1060CS

#### **SCHOTTKY BARRIER RECTIFIERS**

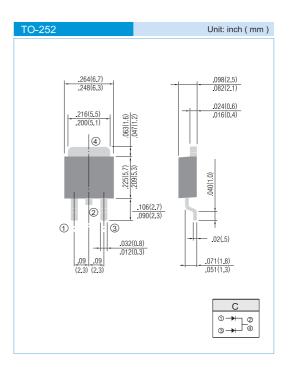
VOLTAGE 20 to 60 Volts CURRENT 10.0 Ampere

#### **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

## **MECHANICALDATA**

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



## MAXIMUM RATINGS AND DELECTRICAL 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	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	٧
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	20	30	40	50	60	V
Maximum Average Forward Rectified Current at T <sub>c</sub> =75°C	I <sub>F(AV)</sub>	10.0					А
Peak Forward Surge Current : 8.3ms single half sine- wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	100					А
Maximum Instantaneous Forward Voltage at 5.0A per leg	V <sub>F</sub>	0.55 0.7			75	V	
Maximum DC Reverse Current T <sub>J</sub> =25°C at Rated DC Blocking Voltage T <sub>J</sub> =100°C	I <sub>R</sub>		0.2 20		0.1 20		mA
Typical Thermal Resistance	R <sub>eJC</sub> R <sub>eJA</sub>	5.0 80					°C / W
Operating Junction Temperature Range	TJ	-55 to	o +125 -55 to +150			°C	
Storage Temperature Range	Тѕтс	-55 to +150				°C	

## NOTES:

1. Both Bonding and Chip structure are available.





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## **RATING AND CHARACTERISTIC CURVES**

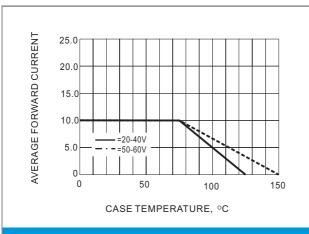


Fig.1- FORWARD CURRENT DERATING CURVE

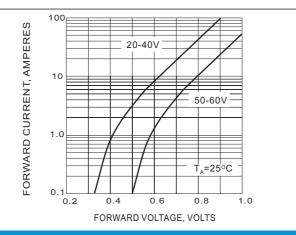


Fig.2- TYPICAL INSTANTANEOUS FORWARD CHRACTERISTIC

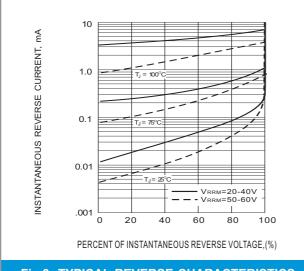


Fig.3- TYPICAL REVERSE CHARACTERISTICS

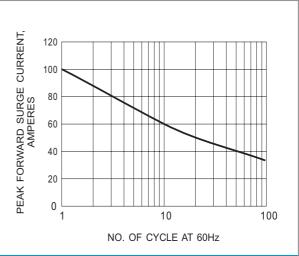


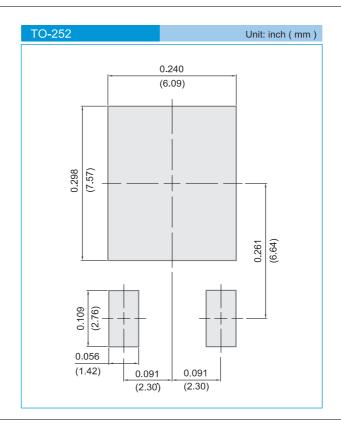
Fig.4- MAXIMUM NON-REPETITIVEPEAK FORWARD SURGE CURRENT





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#### **MOUNTING PAD LAYOUT**



## **ORDER INFORMATION**

• Packing information

T/R - 3K per 13" plastic Reel

## **LEGAL STATEMENT**

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