



#### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage

20~60 V

**Current** 

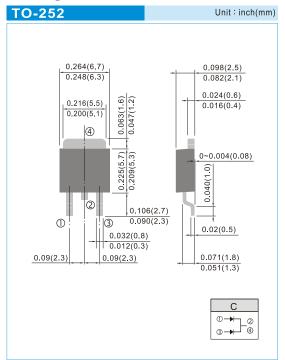
6 A

#### **Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O.
- For surface mounted applications in order to optimize board space
- 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°C/10 seconds at terminals
- Lead free in compliance with EU RoHS 2011/65/EU directive.
- Green molding compound as per IEC61249 Std..(Halogen Free)

#### Mechanical Data

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



## Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)

PARAMETER	SYMBOL	SD620CS	SD630CS	SD640CS	SD650CS	SD660CS	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	V
Maximum rms voltage	V <sub>RMS</sub>	14	21	28	35	42	V
Maximum dc blocking voltage	$V_R$	20	30	40	50	60	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	6					
Peak forward surge current : 8.3ms single half sine- wave superimposed on rated load	I <sub>FSM</sub>	75					А
Maximum forward voltage at 3A per diode	V <sub>F</sub>	0.55 0.			.7	V	
Maximum dc reverse current T <sub>J</sub> =25 °C		0.2			0.1		mA
at rated dc blocking voltage T <sub>J</sub> =100 °C	I <sub>R</sub>	20			20		
Typical thermal resistance	R <sub>⊕JC</sub>	5					°C/W
Operating junction temperature range	TJ	-55 to +125 -55 to +150				°C	
Storage temperature range	T <sub>STG</sub>	-55 to +150					°C

Note: Both Bonding and Chip structure are available.





#### **RATING AND CHARACTERISTIC CURVES**

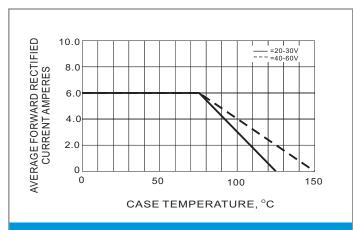


Fig.1 FORWARD CURRENT DERATING CURVE

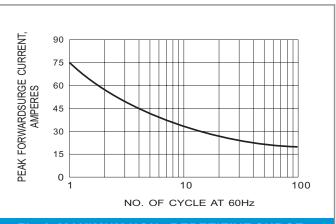


Fig.2 MAXIMUM NON - REPETITIVE SURGE CURRENT

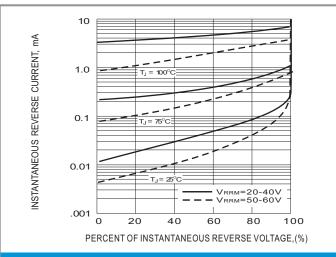


Fig.3 TYPICAL REVERSE CHARACTERISTICS

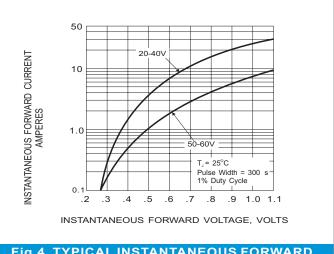
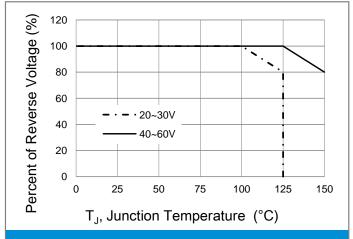


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

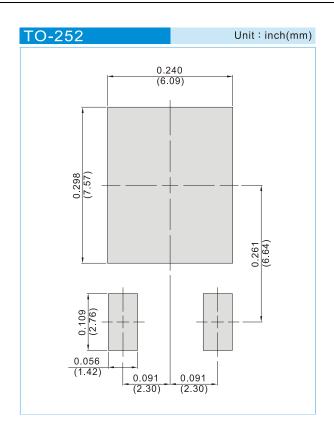


**Fig.5 Operating Temperature Derating Curve** 





#### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

Packing information
 T/R – 3K per 13" plastic Reel

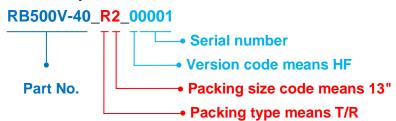




Part No\_packing code\_Version

SD620CS\_L2\_00001 SD620CS\_S2\_00001

#### For example:



Packing Code XX				Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code	
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number	
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number	
Bulk Packing (B/P)	В	13"	2				
Tube Packing (T/P)	Т	26mm	X				
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y				
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U				
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D				





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