#### 20~60 V Voltage

#### 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 ٠
- High surge capacity
- For use in low voltage, high frequency inverters free wheeling, and polarity protection applications
- 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 ۰
- Approx. Weight: 0.0104 ounces, 0.297 grams •
- Marking: Part number •

### Maximum Ratings ( $T_A=25^{\circ}C$ unless otherwise noted)

PARAMETER		SYMBOL	SD320S	SD330S	SD340S	SD350S	SD360S	UNIT
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	20 30 40		40	50	60	V
Maximum rms voltage		V <sub>RMS</sub>	14 21 28		28	35	42	V
Maximum dc blocking voltage		V <sub>R</sub>	20	30	40	50	60	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	3					
Peak forward surge current : 8.3ms single half sine- wave superimposed on rated load		I <sub>FSM</sub>	75					
Maximum forward voltage at 3A per diode (Note 1)		V <sub>F</sub>		0.5	0.64		V	
Maximum dc reverse current	TJ=25 °C			0.2	0.1		mA	
at rated dc blocking voltage	TJ=100 °C	I <sub>R</sub>		20	20			
Typical thermal resistance (Note 2)		$R_{\Theta JC}$	5					°C/W
Operating junction and storage temperature range		$T_J, T_{STG}$	-55 to +125			-55 to +150	°C	

Note :

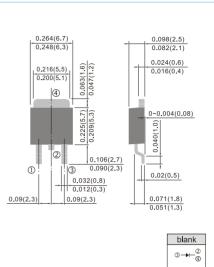
- Pulse Test with PW=300µsec, 1% Duty Cycle 1.
- Mounted on P.C. Board with 8mm<sup>2</sup> (0.013mm thick) copper pad areas. 2.





# SD320S~SD360S

#### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS Current 3 A



Unit : inch(mm)

**TO-252** 





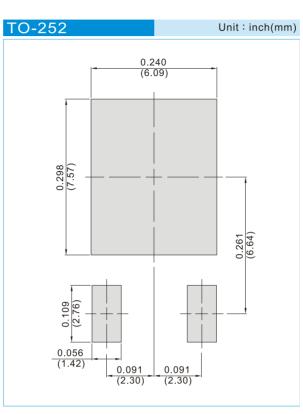
#### 5.0 AVERAGE FORWARD RECTIFIED CURRENT AMPERES ---- =20-30V ---- =40-60V PEAK FORWARD SURGE CURRENT, AMPERES 80 4.0 75 3.0 60 45 2.0 30 RESISTIVEORINDUCTIVELOAD 1.0 15 0 0 L 1 0 20 40 60 80 100 120 140 160 10 100 NO. OF CYCLE AT 60Hz LEAD TEMPERATURE, °C Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT Fig.1- FORWARD CURRENT DERATING CURVE 50 10 INSTANTANEOUS REVERSE CURRENT, mA INSTANTANEOUS FORWARD CURRENT AMPERES 50-60V 10 20-40V 1.0 J=75°0 0.1 1.0 TJ=25°C .01 TJ=25<sup>°</sup>C f=1.0mHz Visg=5mVp-p 0.1 .001 .2 .3 .4 .5 .6 .7 .8 .9 1.0 1.1 20 40 60 80 100 120 140 ō INSTANTANEOUS FORWARD VOLTAGE, VOLTS PERCENT OF INSTANTANEOUS REVERSE VOLTAGE,(%) Fig.4- TYPICAL INSTANTANEOUS FORWARD Fig.3- TYPICAL REVERSE CHARACTERISTICS **CHARACTERISTICS**

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





#### MOUNTING PAD LAYOUT



#### **ORDER INFORMATION**

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



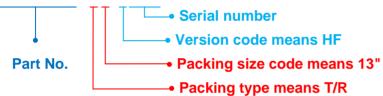


#### Part No\_packing code\_Version

SD320S\_L2\_00001 SD320S\_S2\_00001

### For example :

#### RB500V-40\_R2\_00001



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)	Α	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					



### Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from Panjit International Inc..
- Panjit International Inc. reserves the rights to make changes of the content herein the document anytime without notification. Please refer to our website for the latest document.
- Panjit International Inc. disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- Panjit International Inc. does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the herein document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications. Panjit International Inc. makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown herein are not designed and authorized for equipments requiring high level of
  reliability or relating to human life and for any applications concerning life-saving or life-sustaining,
  such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers
  using or selling these products for use in such applications do so at their own risk and agree to fully
  indemnify Panjit International Inc. for any damages resulting from such improper use or sale.
- Since Panjit uses lot number as the tracking base, please provide the lot number for tracking when complaining.

## **Mouser Electronics**

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Panjit:

SD330S\_L2\_00001 SD330S\_S2\_00001