



## SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage

40~200 V

Current

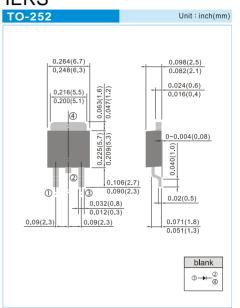
3 A

#### **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
- 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	BD340S	BD345S	BD350S	BD360S	BD380S	BD390S	BD3100S	BD3150S	BD3200S	UNIT
Maximum repetitive peak reverse voltage		$V_{RRM}$	40	45	50	60	80	90	100	150	200	V
Maximum rms voltage		V <sub>RMS</sub>	28	31.5	35	42	56	63	70	105	140	V
Maximum dc blocking voltage		$V_R$	40	45	50	60	80	90	100	150	200	V
Maximum average forward rectified current		I <sub>F(AV)</sub>	3								Α	
Peak forward surge current: 8.3ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	75								Α	
Maximum forward voltage at 3A per diode (Note 1)		V <sub>F</sub>	0.7 0.74 0.8 0.9			.9	V					
Maximum dc reverse current at rated dc blocking voltage	T <sub>J</sub> =25 °C T <sub>J</sub> =100 °C	I <sub>R</sub>	0.05 20						mA			
Typical thermal resistance (Note 2)		$R_{\Theta JL}$ $R_{\Theta JA}$	20 75								°C/W	
Operating junction and storage temperature range		$T_J, T_STG$	-55 to +150 -65 to +175							°C		

#### Note:

- 1. Pulse Test with PW=300μsec, 1% Duty Cycle
- 2. Mounted on P.C. Board with 8mm² (0.013mm thick) copper pad areas.





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

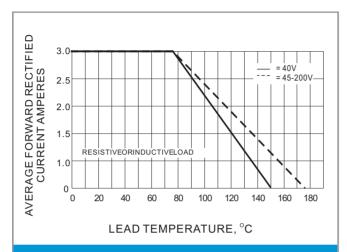


Fig.1- FORWARD CURRENT DERATING CURVE

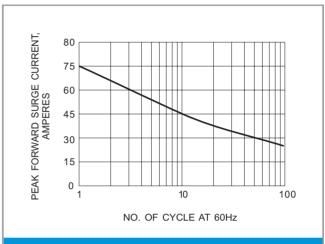


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

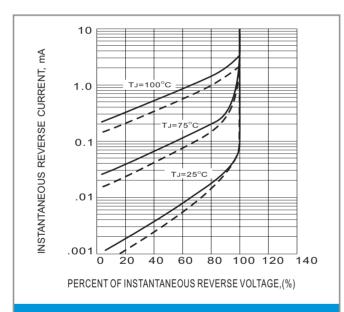


Fig.3- TYPICAL REVERSE CHARACTERISTICS

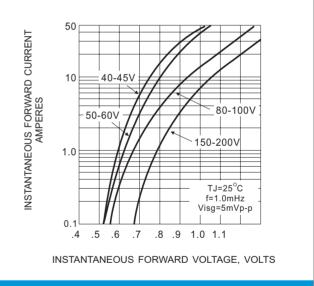
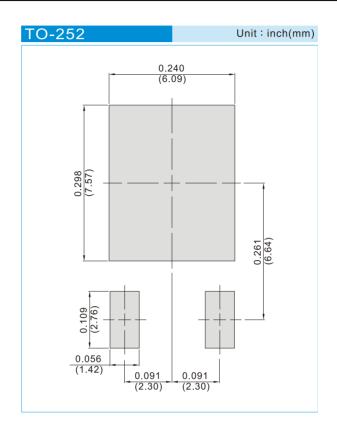


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

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

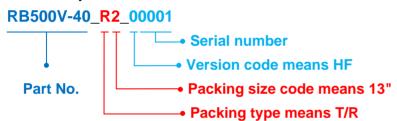




Part No\_packing code\_Version

BD340S\_L2\_00001 BD340S\_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)	Τ.	26mm	X						
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y						
Tape and Reel (Left Oriented) (TRL)	٦	PANASERT T/B CATHODE UP (PBCU)	U						
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D						





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