



### SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage

40~200 V

Current

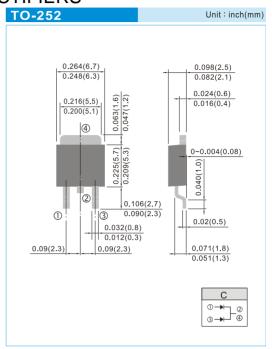
8 A

#### **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
- 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
- Standard packaging: 16mm tape (EIA-481)
- Approx. Weight: 0.0104 ounces, 0.297 grams
- Marking: Part number



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

PARAMETER		SYMBOL	BD840CS	BD845CS	BD850CS	BD860CS	BD880CS	BD890CS	BD8100CS	BD8150CS	BD8200CS	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>	8								Α	
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	85								Α	
Maximum forward voltage at 4A per diode		V <sub>F</sub>	0.7 0.75 0.8 0.9				.9	V				
Maximum dc reverse current at	T <sub>J</sub> =25 °C		0.05									mA
rated dc blocking voltage	T <sub>J</sub> =100 °C	I <sub>R</sub>	20									
Typical thermal resistance		$R_{\Theta JC}$	5								°C/W	
Operating junction and storage temperature range		$T_J, T_STG$	-55 to +150 -65 to +175							°C		

Note: Both Bonding and Chip structure are available.





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

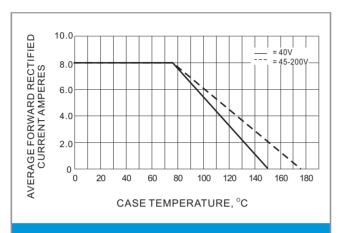


Fig.1- FORWARD CURRENT DERATING CURVE

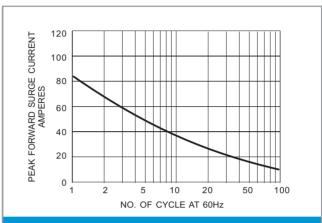


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

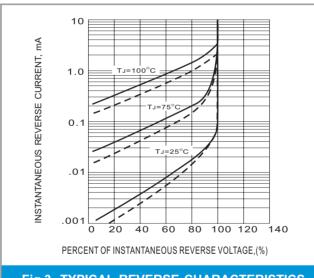


Fig.3- TYPICAL REVERSE CHARACTERISTICS

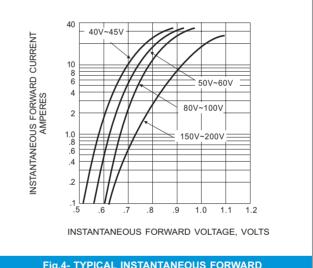
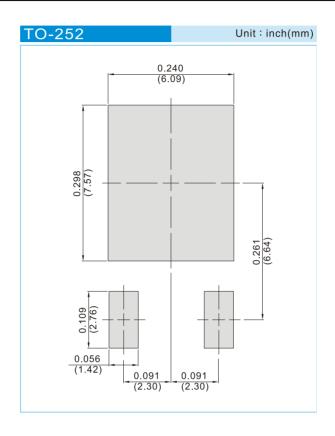


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS





### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

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

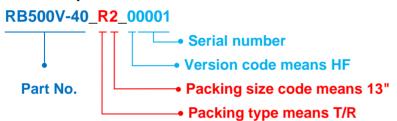




Part No\_packing code\_Version

BD840CS\_L2\_00001 BD840CS\_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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BD8200CS\_L2\_00001 BD8200CS\_S2\_00001