

SD820CS~SD860CS

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

Voltage

20~60 V

Current

8 A

TO-252

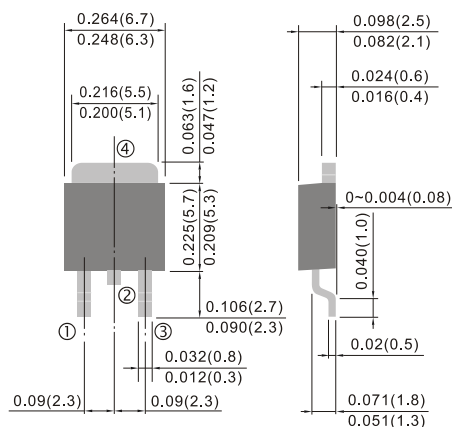
Unit : inch(mm)

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



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

PARAMETER		SYMBOL	SD820CS	SD830CS	SD840CS	SD850CS	SD860CS	UNIT
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	50	60	V
Maximum rms voltage		V _{RMS}	14	21	28	35	42	V
Maximum dc blocking voltage		V _R	20	30	40	50	60	V
Maximum average forward rectified current		I _{F(AV)}	8					A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load		I _{FSM}	85					A
Maximum forward voltage at 4A per diode		V _F	0.55			0.75		V
Maximum dc reverse current	T _J =25 °C	I _R	0.2			0.1		mA
at rated dc blocking voltage	T _J =100 °C		20			20		
Typical thermal resistance		R _{θJC}	5					°C/W
		R _{θJA}	80					
Operating junction temperature range		T _J	-55 to +125		-55 to +150			°C
Storage temperature range		T _{STG}	-55 to +150					°C

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RATING AND CHARACTERISTIC CURVES

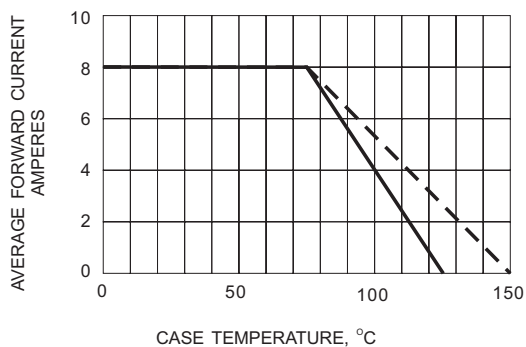


Fig.1- FORWARD CURRENT DERATING CURVE

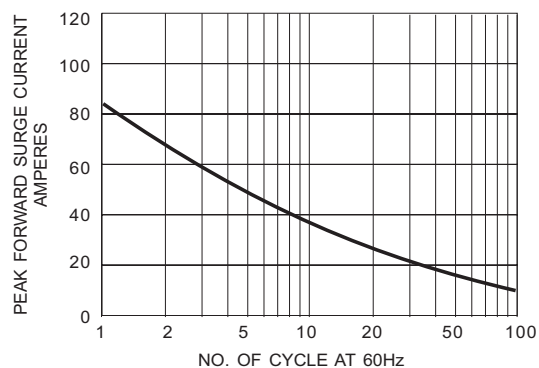


Fig.2- MAXIMUM NON - REPETITIVE SURGE CURRENT

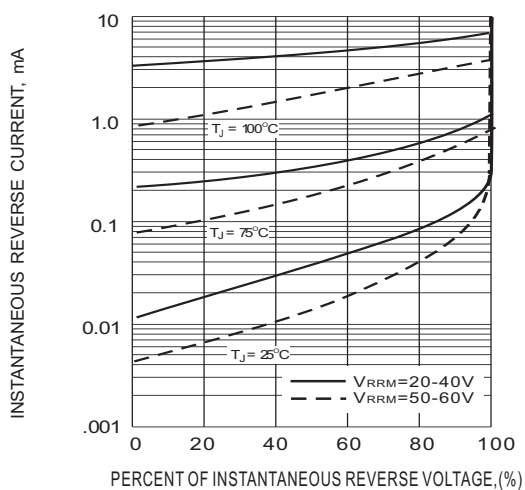


Fig.3- TYPICAL REVERSE CHARACTERISTICS

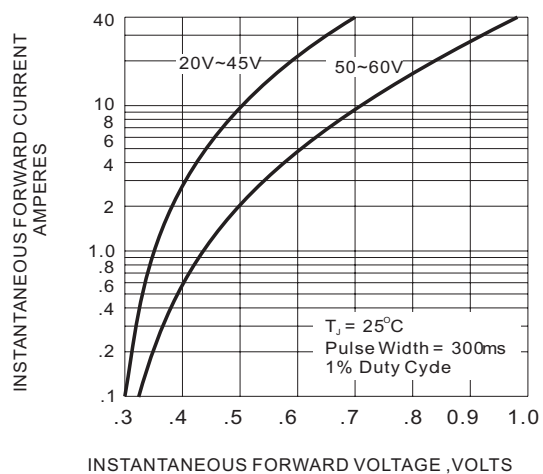
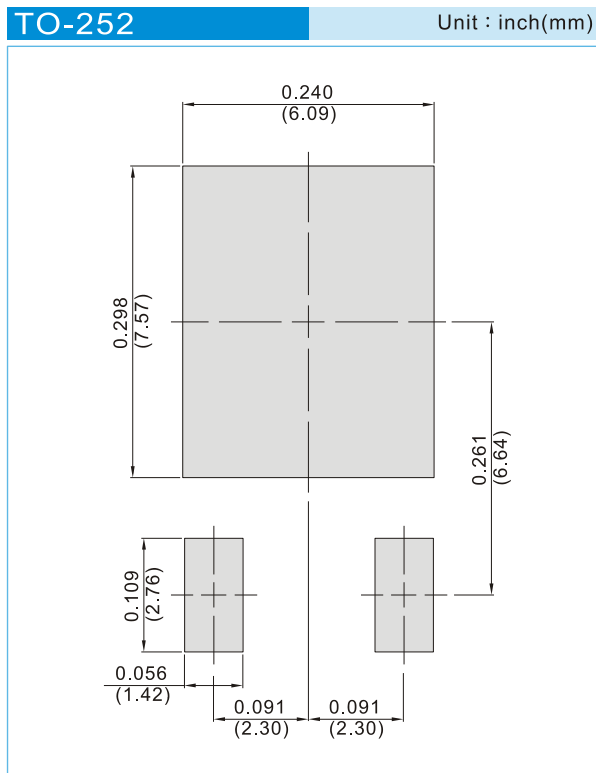


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

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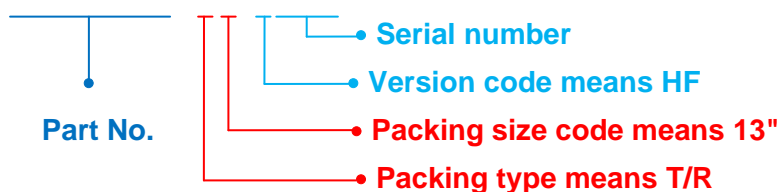
Part No_packing code_Version

SD820CS_L2_00001

SD820CS_S2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th 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)	B	13"	2			
Tube Packing (T/P)	T	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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