



BR310V

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volt **CURRENT** 3 Ampere

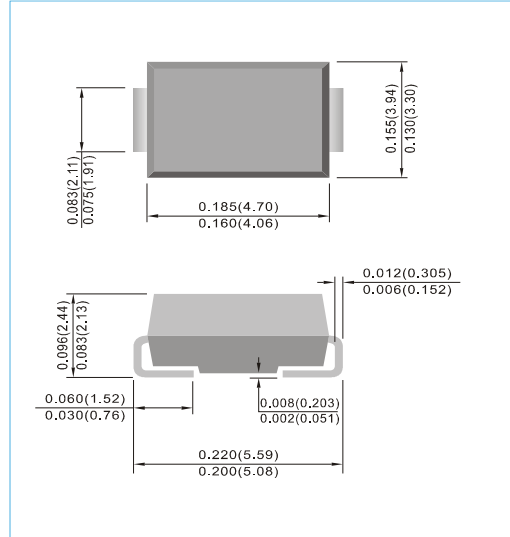
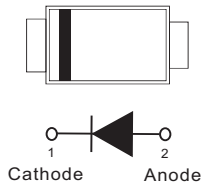
SMB / DO-214AA Unit : inch(mm)

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
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case : JEDEC DO-214AA molded plastic
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Standard packaging : 12mm tape (EIA-481)
- Weight : 0.0032 ounce, 0.092 gram



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

PARAMETER	SYMBOL	VALUE	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS Voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_R	100	V
Maximum Average Rectified Output Current	$I_{F(AV)}$	3	A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	120	A
Typical Thermal Resistance	(Note 1) $R_{\theta JL}$	23	$^{\circ}\text{C/W}$
	(Note 1) $R_{\theta JC}$	15	
	(Note 2) $R_{\theta JA}$	135	
Operating Junction Temperature Range And Storage Temperature Range	T_J, T_{STG}	-55 to + 150	$^{\circ}\text{C}$

NOTES:1.Mounted on a FR4 PCB, single-sided copper, with 10cm*10cm copper pad area
2.Mounted on a FR4 PCB, single-sided copper, mini pad.



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ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V _{BR}	I _R =0.5mA T _A =25°C	100	-	-	V
Instantaneous forward voltage	V _F	I _F =1A I _F =3A T _A =25°C	- -	0.57 0.71	- 0.74	V
		I _F =1A I _F =3A T _A =125°C	- -	0.47 0.57	- -	V
Reverse current	I _R	V _R =80V T _A =25°C	-	0.2	-	μA
		V _R =100V T _A =25°C T _A =125°C	- -	- 0.8	50 -	μA mA



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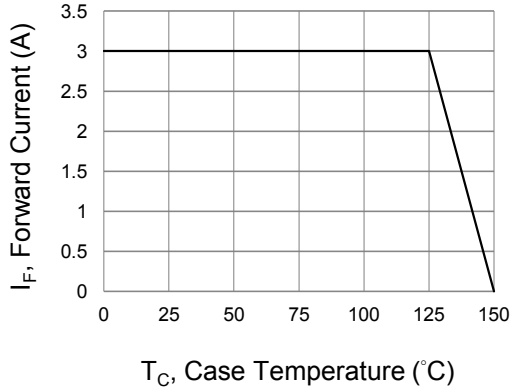


Fig.1 Forward Current Derating Curve

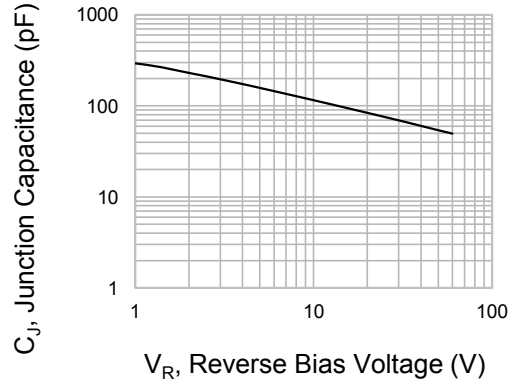


Fig.2 Typical Junction Capacitance

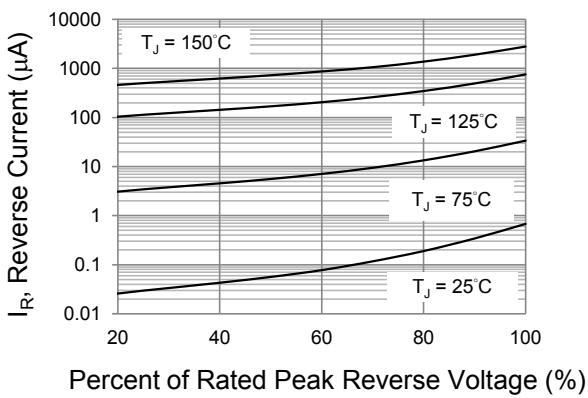


Fig.3 Typical Reverse Characteristics

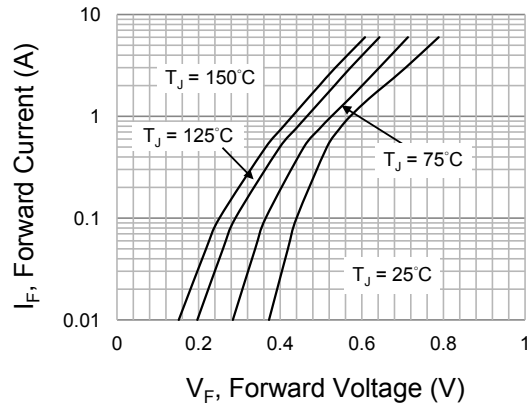


Fig.4 Typical Forward Characteristics

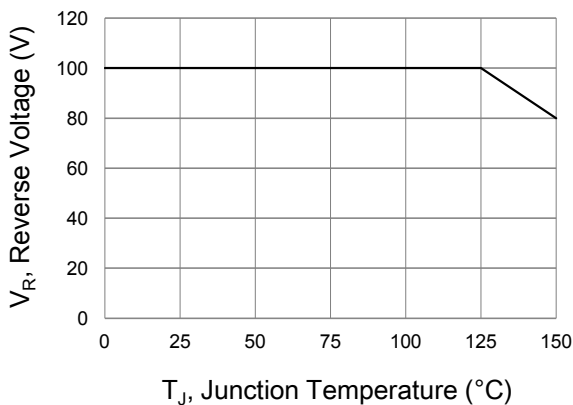


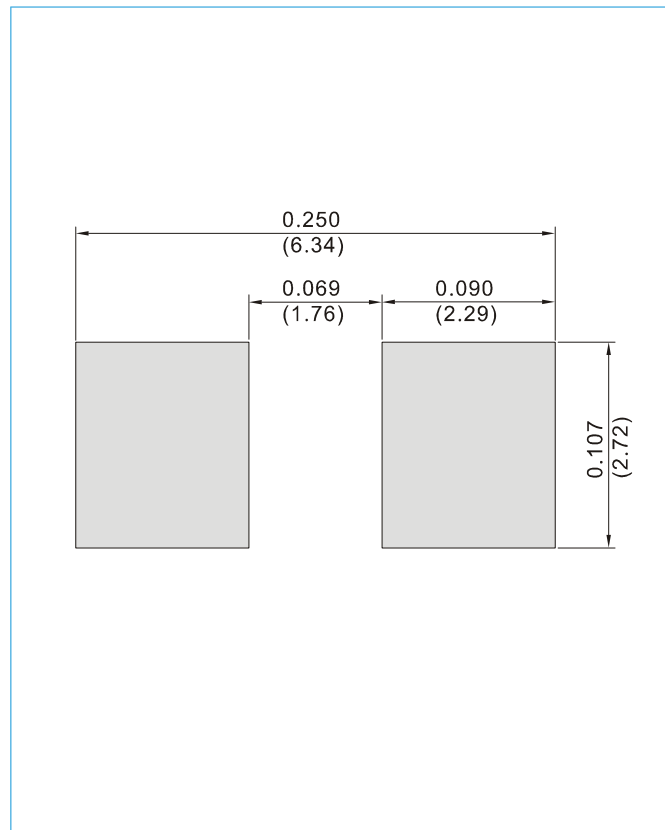
Fig.5 Operating Temperature Derating Curve



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MOUNTING PAD LAYOUT

SMB / DO-214AA Unit : inch(mm)



ORDER INFORMATION

- Packing information
T/R - 3K per 13" plastic Reel
T/R - 0.8K per 7" plastic Reel



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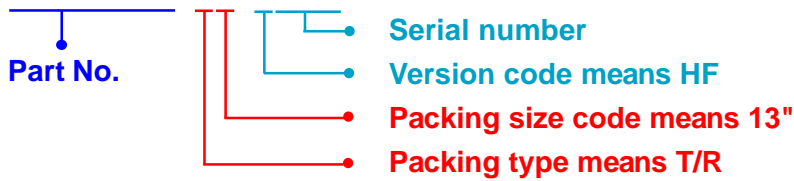
Part No_packing code_Version

BR310V_R1_00001

BR310V_R2_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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