

BR310V

ULTRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 100 Volt **CURRENT** 3 Ampere

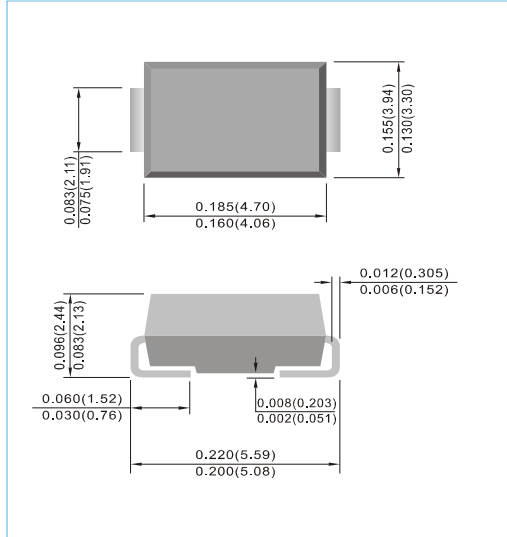
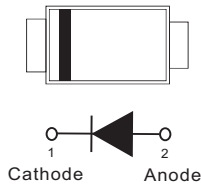
SMB / DO-214AA Unit : inch(mm)

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°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 _{θJL}	23	°C/W
	(Note 1) R _{θJC}	15	
	(Note 2) R _{θJA}	135	
Operating Junction Temperature Range And Storage Temperature Range	T _J , T _{STG}	-55 to + 150	°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 (TA=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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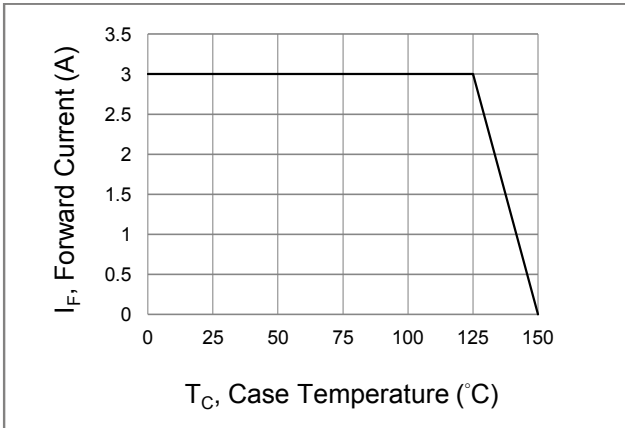


Fig.1 Forward Current Derating Curve

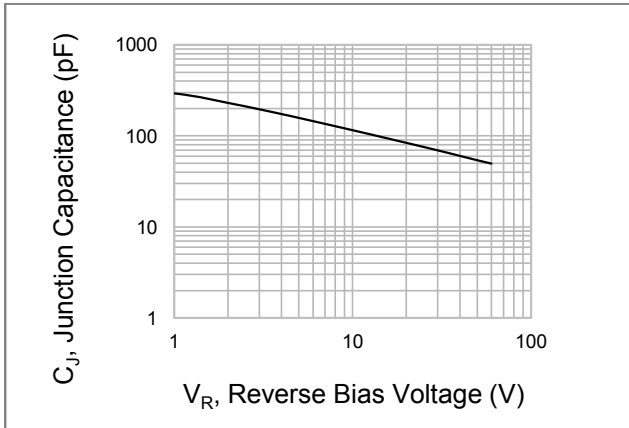


Fig.2 Typical Junction Capacitance

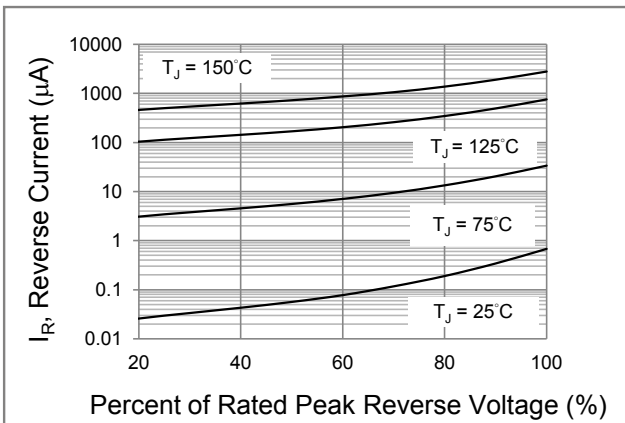


Fig.3 Typical Reverse Characteristics

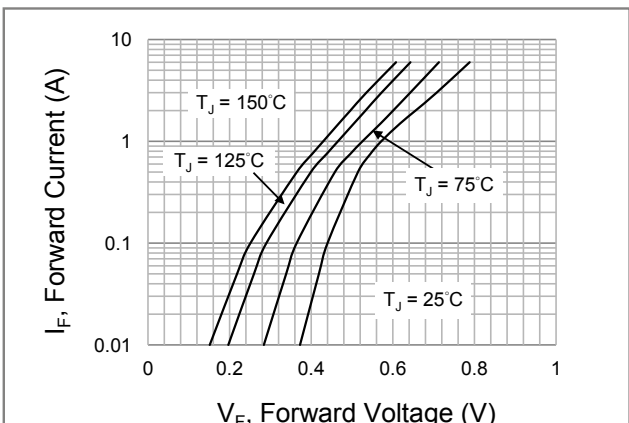


Fig.4 Typical Forward Characteristics

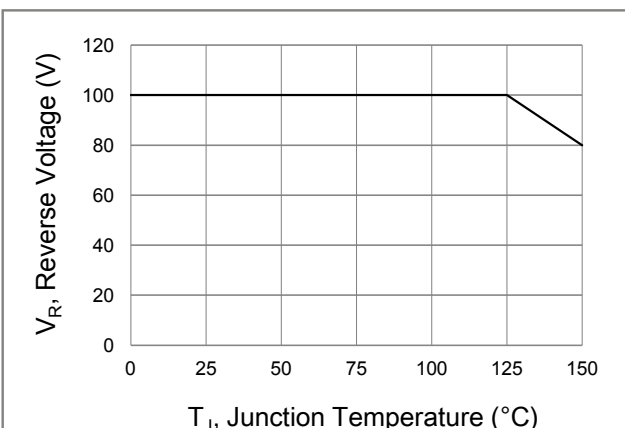
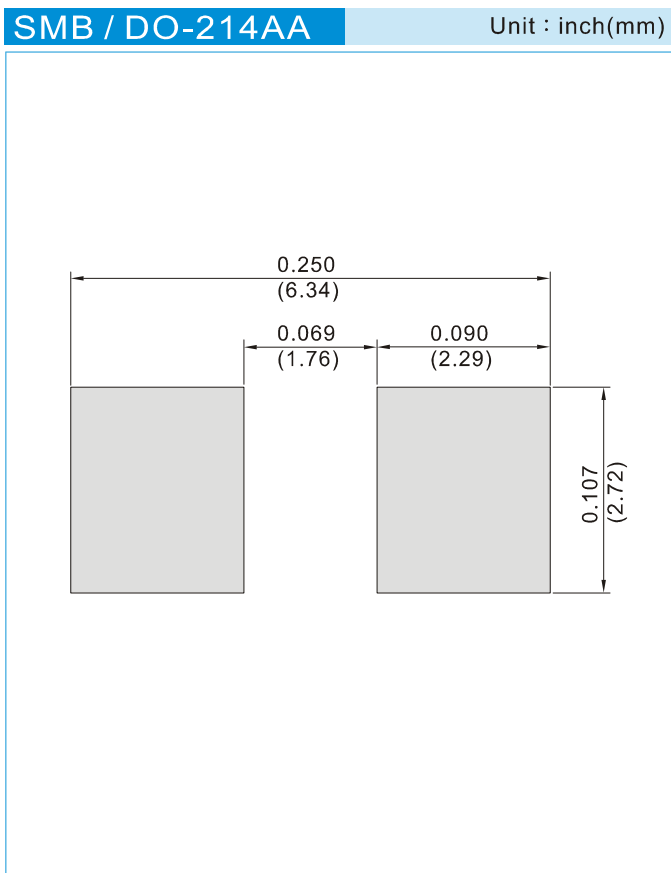


Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT



ORDER INFORMATION

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

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