

## BR24 SERIES

### MINI SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

**VOLTAGE** 40 to 200 Volts **CURRENT** 2 Amperes

**SMA / DO-214AC**

Unit : inch(mm)

#### FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For surface mounted applications
- Metal to silicon rectifier. majority carrier conduction
- 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 comply with EU RoHS 2002/95/EC directives
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### MECHANICAL DATA

- Case: JEDEC DO-214AC 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: 0.0023 ounce, 0.0679 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load.

PARAMETER	SYMBOL	BR24	BR24A	BR25	BR26	BR28	BR29	BR210	BR215	BR220	UNITS
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	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 <sub>DC</sub>	40	45	50	60	80	90	100	150	200	V
Maximum Average Forward Current (See Figure 1)	I <sub>F(AV)</sub>	2.0									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I <sub>FSM</sub>	50									A
Maximum Forward Voltage at 2.0A ( Notes 1)	V <sub>F</sub>	0.7				0.80			0.9		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 ( Notes 2)	R <sub>θJL</sub> R <sub>θJA</sub>	20 75									°C / W
Operating Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55 to +150		-55 to +175							°C

#### NOTES:

1. Pulse Test with PW =300μsec, 1% Duty Cycle.
2. Mounted on P.C. Board with 8mm<sup>2</sup> (.013mm thick) copper pad areas.

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### RATING AND CHARACTERISTIC CURVES

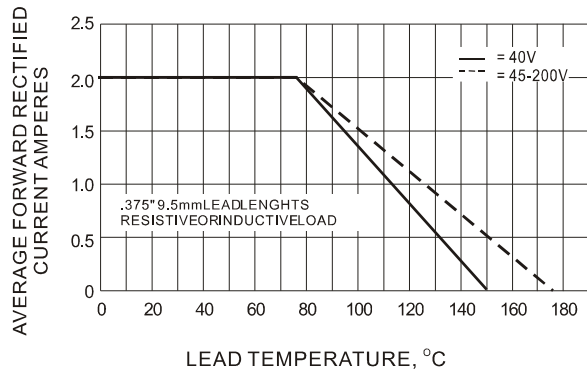


Fig.1- FORWARD CURRENT DERATING CURVE

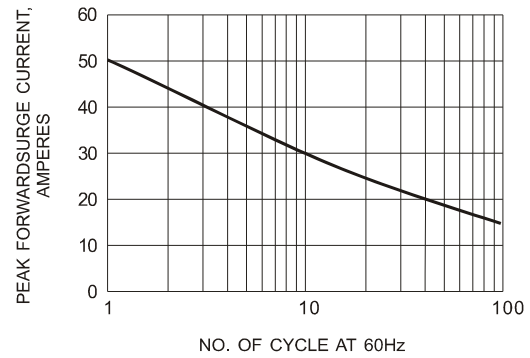


Fig.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

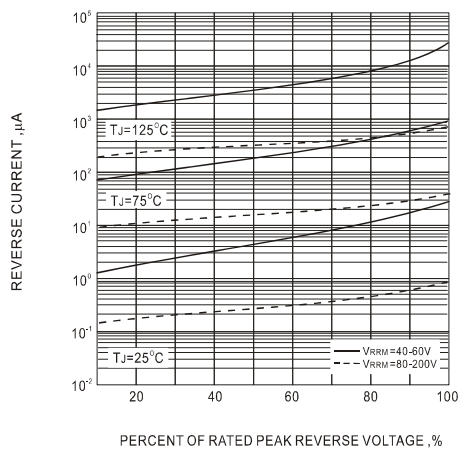


Fig.3- TYPICAL REVERSE CHARACTERISTIC

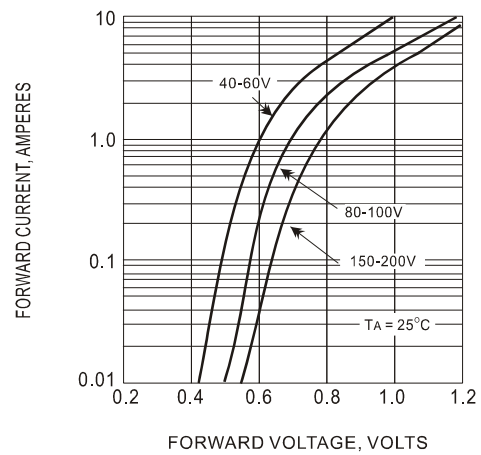
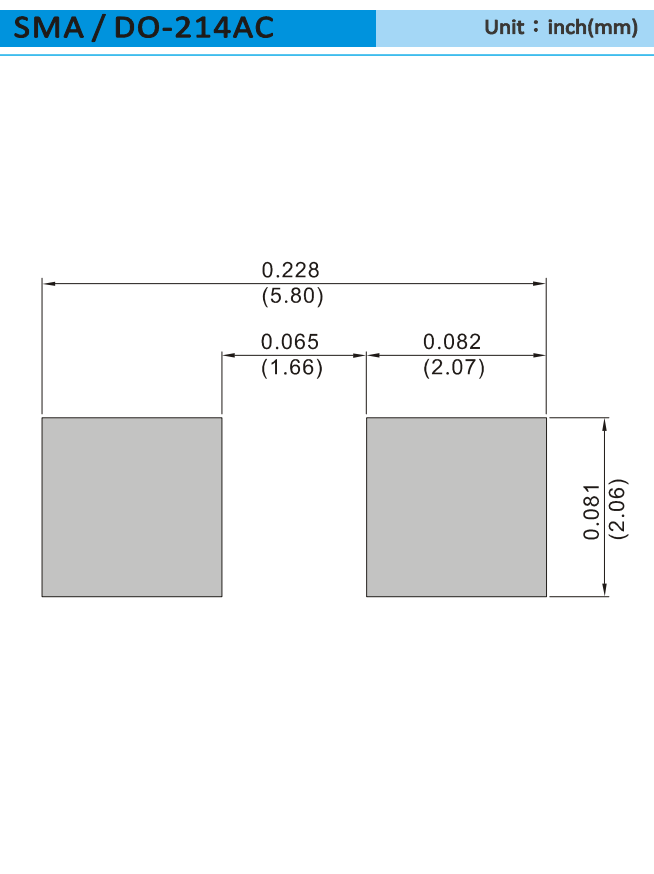


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

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### MOUNTING PAD LAYOUT



### ORDER INFORMATION

- Packing information
  - T/R - 7.5K per 13" plastic Reel
  - T/R - 1.8K per 7" plastic Reel

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### Part No\_packing code\_Version

BR24\_R1\_00001

BR24\_R1\_10001

BR24\_R2\_00001

BR24\_R2\_10001

For example :

RB500V-40\_R2\_00001

Part No.

Serial number

Version code means HF

Packing size code means 13"

Packing type means T/R

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)	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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