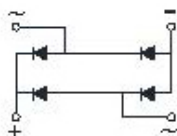
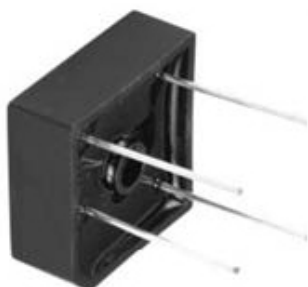


**BR50005W THRU BR5010W**

**Bridge Rectifiers**

RoHS  
COMPLIANT



**Features**

- UL recognition, file #E230084
- Universal 3-way terminals: snap-on, wire wrap-around, or PCB mounting
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

**Typical Applications**

General purpose use in AC/DC bridge full wave rectification for power supply, home appliances, office equipment, industrial automation applications.

**Mechanical Data**

- Package:**BR-W
- Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102 Suffix letter "W" added to indicate wire leads(e.g. BR5010W).

■ **Maximum Ratings** (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR50005W	BR5001W	BR5002W	BR5004W	BR5006W	BR5008W	BR5010W
Device marking code									
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, T <sub>c</sub> =55°C	I <sub>O</sub>	A	50						
Surge(Non-repetitive)Forward Current @60Hz Half- sine Wave, 1 cycle, T <sub>a</sub> =25°C	IFSM	A	500						
Current Squared Time @1ms≤t≤8.3ms T <sub>j</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> S	1040						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

■ **Electrical Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR50005W	BR5001W	BR5002W	BR5004W	BR5006W	BR5008W	BR5010W
Maximum instantaneous forward voltage drop per diode	V <sub>FM</sub>	V	I <sub>FM</sub> =25A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =VRRM	10						

**BR50005W THRU BR5010W**

■ **Thermal Characteristics** ( $T_a=25^\circ\text{C}$  Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	BR50005W	BR5001W	BR5002W	BR5004W	BR5006W	BR5008W	BR5010W
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	$^\circ\text{C/W}$	1.2						

■ **Ordering Information** (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR50005W~BR5010W	A1	Approximate 16.5	50	50	500	Paper Box

■ **Characteristics** (Typical)

FIG1:Io-Tc Curve

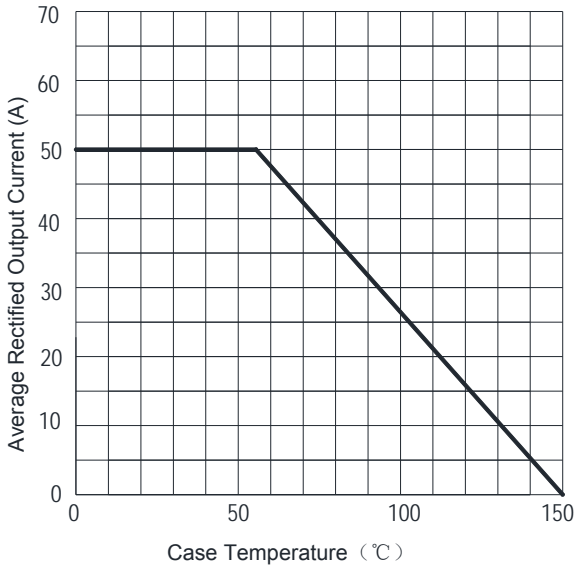


FIG2:Surge Forward Current Capability

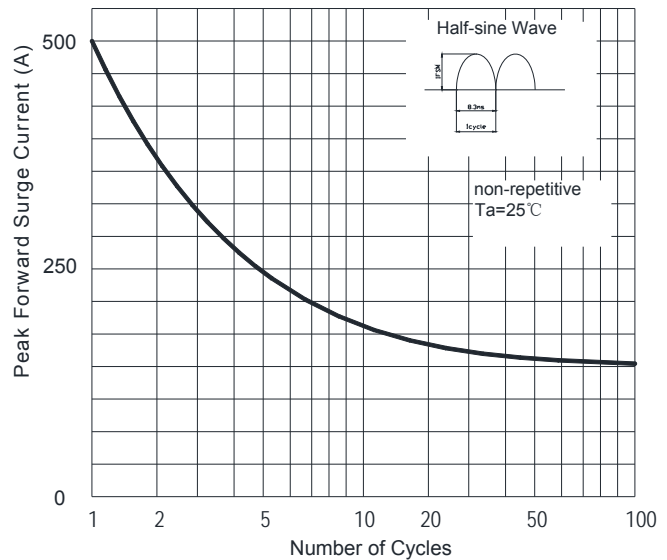


FIG3:Instantaneous Forward Voltage

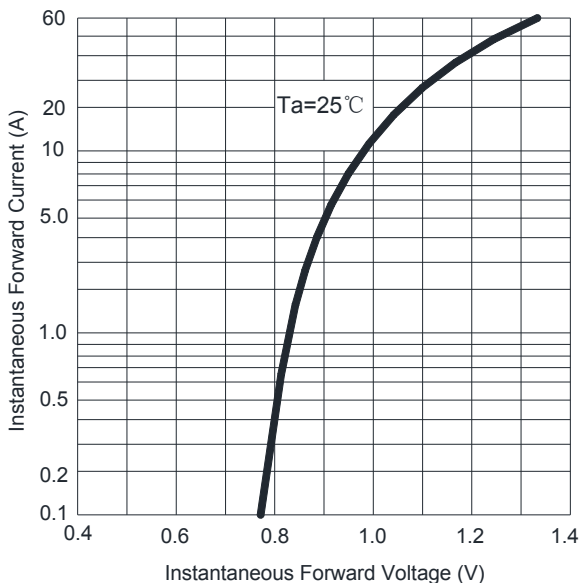
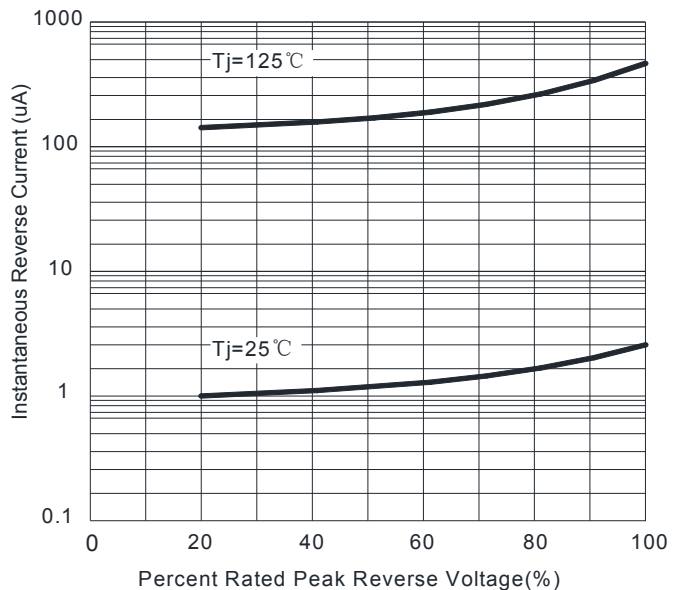
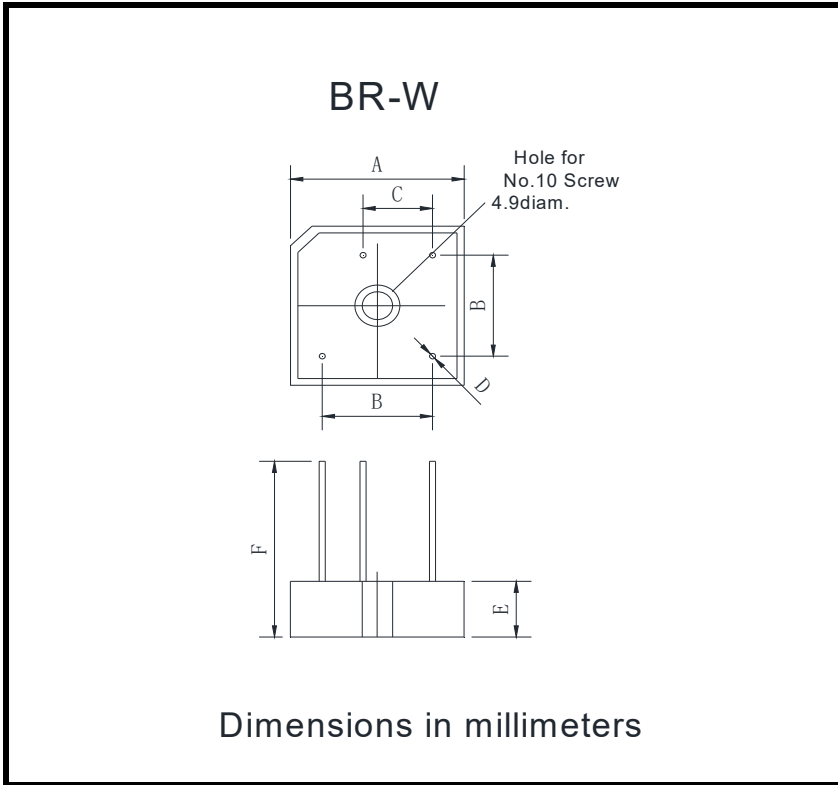


FIG4:Typical Reverse Characteristics



■ Outline Dimensions

**BR50005W THRU BR5010W**



BR-W		
Dim	Min	Max
A	28.2	28.8
B	17.1	19.1
C	10.4	12.4
D	0.95	1.05
E	10.8	11.2
F	30	/

**BR50005W THRU BR5010W**

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