## BR15005(W) - BR1510(W)

# **Bridge Rectifiers**

#### **Features**

UL recognition, file #E230084 Universal 3-way Terminals: snap-on, wire wrap-around, or PCB mounting.

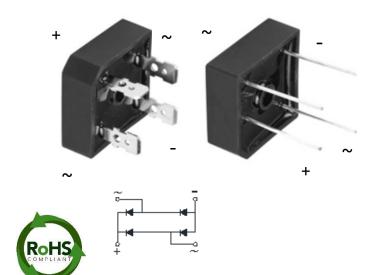
- High surge current capability
- Low thermal resistance
- Solder dip 275 °C max. 7 s, per JESD 22-B106

#### **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,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.BR1510W).



## ■ Maximum Ratings (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR15005	BR1501	BR1502	BR1504	BR1506	BR1508	BR1510
Device marking code			BR15005	BR1501	BR1502	BR1504	BR1506	BR1508	BR1510
Repetitive Peak Reverse Voltage	VRRM	٧	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, Tc=55°C	lo	A	15						
Surge(Non-repetitive)Forward Current @60HZ Half-sine Wave, 1 cycle, Ta=25℃	IFSM	А	300						
Current Squared Time @1ms≤t≤8.3ms Tj=25°C, Rating of per diode	l <sup>2</sup> t	A <sup>2</sup> S	375						
Storage Temperature	T <sub>stg</sub>	$^{\circ}$	-55 ~+150						
Junction Temperature	Tj	$^{\circ}$	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	$V_{dis}$	KV	2.5						
Mounting Torque	TOR	kg⋅cm	10						

## ■ Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR15005	BR1501	BR1502	BR1504	BR1506	BR1508	BR1510
Maximum instantaneous forward voltage drop per diode	VFM	>	IFM=7.5A				1.1			
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μΑ	VRM=VRRM	10						

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

PARAMETER		SYMBOL	UNIT	BR15005	BR1501	BR1502	BR1504	BR1506	BR1508	BR1510
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	°C/W	3.3						

■ Ordering Information (Example)

		1 /				
PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR15005~BR1510	A1	Approximate 18.6	50	50	500	Paper Box
BR15005W~BR1510W	A1	Approximate 16.5	50	50	500	Paper Box

#### **■ Characteristics** (Typical)

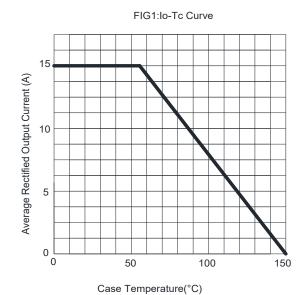


FIG2:Surge Forward Current Capability

300

We half-sine Wave

100

100

100

100

Number of Cycles



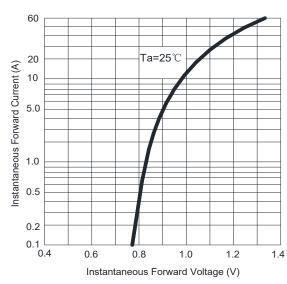
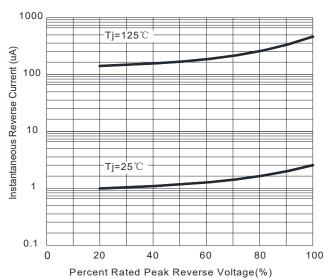


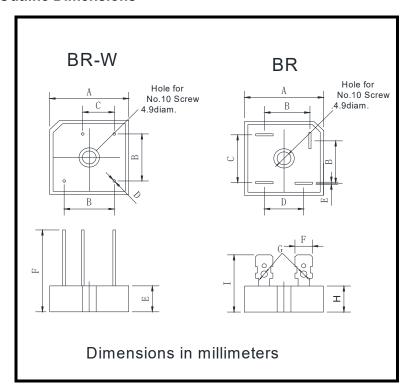
FIG4:Typical Reverse Characteristics



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#### **■ Outline Dimensions**



BR-W						
Dim	Min	Max				
Α	28.2	28.8				
В	17.1	19.1				
С	10.4	12.4				
D	0.95	1.05				
Е	10.8	11.2				
F	30	1				

BR							
Dim	Min	Max					
Α	28.2	28.8					
В	15.3	17.3					
С	17.1	19.1					
D	13.2	15.2					
Е	0.75	0.85					
F	6.2	6.4					
G	2.3	2.5					
Н	10.8	11.2					
Ī	19	1					

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