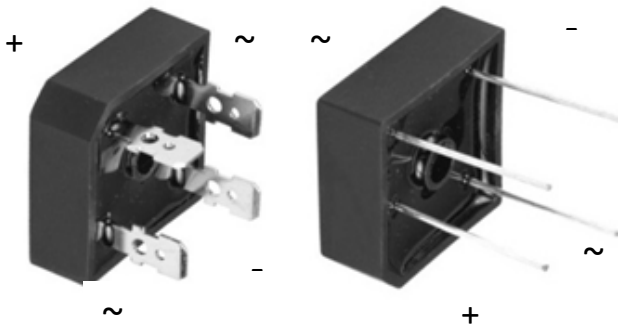
Bridge Rectifiers

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

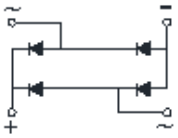


Typical Applications

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. BR3510W).



■ Maximum Ratings (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	BR35005	BR3501	BR3502	BR3504	BR3506	BR3508	BR3510
Device marking code			BR35005	BR3501	BR3502	BR3504	BR3506	BR3508	BR3510
Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load, With heatsink, Tc=55℃	I_O	A	35						
Surge(Non-repetitive)Forward Current @60HZ Half- sine Wave, 1 cycle, T_a=25℃	I_{FSM}	A	400						
Current Squared Time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode	I^2t	A^2S	660						
Storage Temperature	Tstg	℃	-55 ~+150						
Junction Temperature	Tj	℃	-55 ~+150						
Dielectric Strength, Terminals to case, AC 1 minute	V_{dis}	KV	2.5						
Mounting Torque	TOR	kg·cm	10						

■ Electrical Characteristics (T_a=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	BR35005	BR3501	BR3502	BR3504	BR3506	BR3508	BR3510
Maximum instantaneous forward voltage drop per diode	V_{FM}	V	I_{FM}=17.5A	1.1						
Maximum DC reverse current at rated DC blocking voltage per diode	I_{RRM}	μA	V_{RM}=V_{RRM}	10						

■ Thermal Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	BR35005	BR3501	BR3502	BR3504	BR3506	BR3508	BR3510
Thermal Resistance	Between junction and case, With heatsink	$R_{\theta J-C}$	℃/W	1.5						

■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BR35005~BR3510	A1	Approximate 18.6	50	50	500	Paper Box
BR35005W~BR3510W	A1	Approximate 16.5	50	50	500	Paper Box

■ Characteristics (Typical)

FIG1:Io-Tc Curve

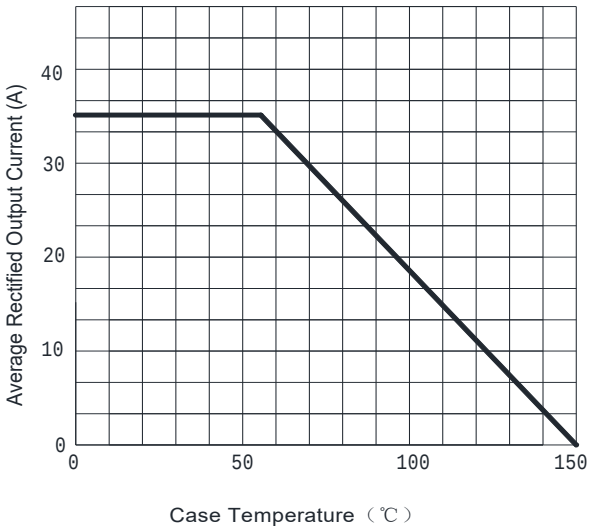


FIG2:Surge Forward Current Capability

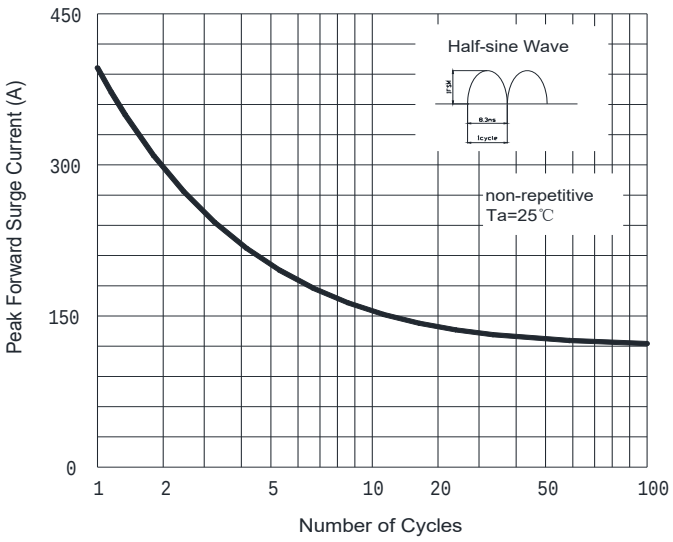


FIG3:Instantaneous Forward Voltage

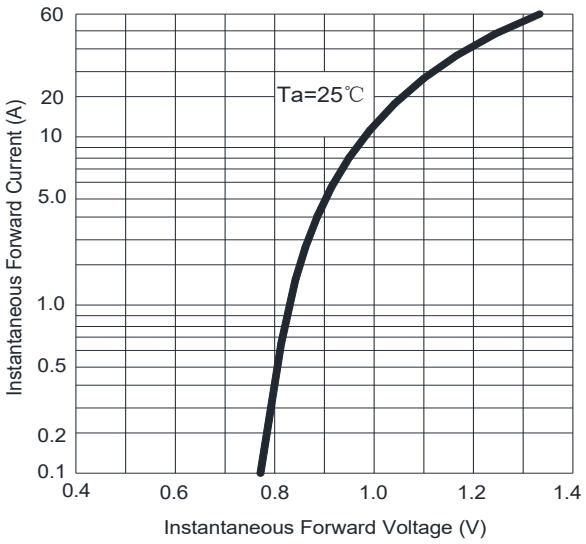
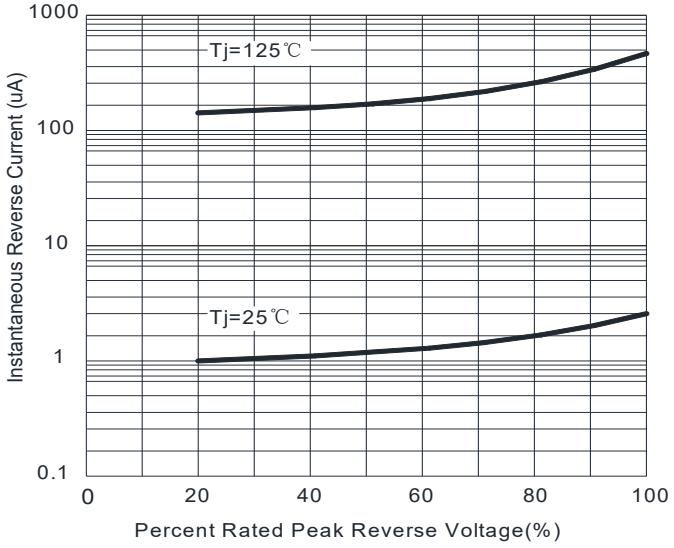
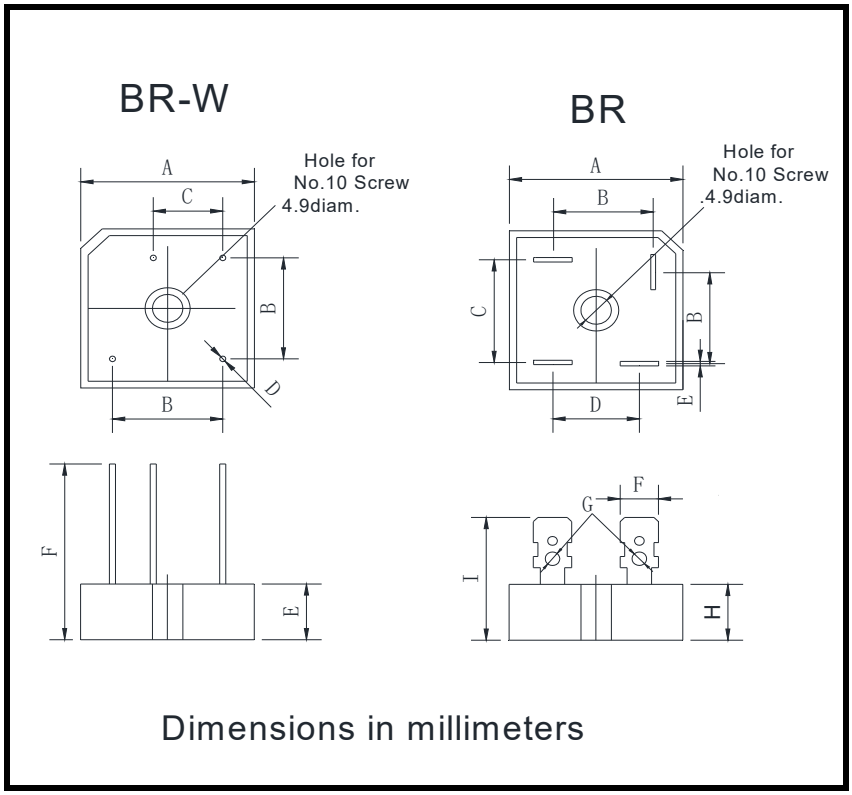


FIG4:Typical Reverse Characteristics



■ Outline Dimensions



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	/

BR		
Dim	Min	Max
A	28.2	28.8
B	15.3	17.3
C	17.1	19.1
D	13.2	15.2
E	0.75	0.85
F	6.2	6.4
G	2.3	2.5
H	10.8	11.2
I	19	/

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