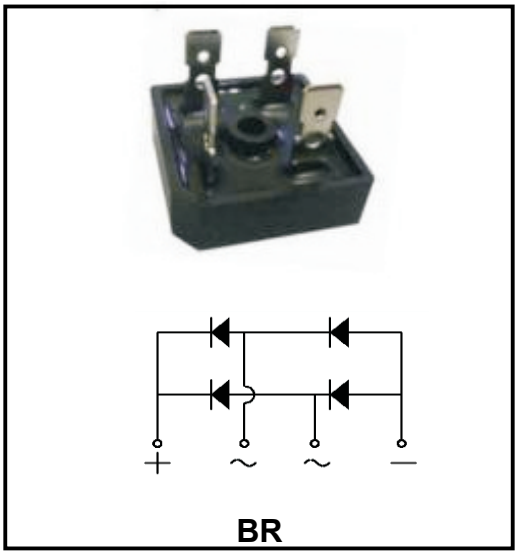
BR5006 THRU BR5012 BR

Single Phase Glass Passivated Bridge Rectifier

Reverse Voltage - 600V to 1200V

Forward Current - 50 A



FEATURES

- Glass passivated chip
- Low reverse leakage current
- High surge current capability

Applications

- Electric welder
- Industrial power supply
- Inverter
- Uninterruptible power supply

MECHANICAL DATA

- Case:BR
- Polarity: Polarity symbols being marked on body
- Mounting torque: 12.0 kgf.cm max
- Weight: About20 grams

Maximum Ratings @ Ta = 25℃ unless otherwise noted

Parameter		Symbols	BR5006	BR5008	BR5010	BR5012	Units
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	600	800	1000	1200	V
Maximum RMS voltage		V_{RMS}	420	560	700	840	V
Maximum DC Blocking Voltage		V_{DC}	600	800	1000	1200	V
Averagerectifiedoutputcurrent with heatsinkTc=85°C		$I_{(AV)}$	50				A
Peak surge forward current, 8.3mssingle half sine-wave superimposed on rated load		I_{FSM}	500				A
Rating for fusing1ms<t<8.3msTj=25℃, Rating of per diode		I^2t	1037				A^2s
Forward Voltage I_F=37.5A		V_F	1.1				V
Peak Reverse Current VR=VRRM ,Pulse measurementRating of per diode	Tj=25℃ Tj=125℃	I_R	5 500				μA
Dielectric strengthterminals to case AC 1 minute		V_{dis}	2.5				KV
Junction to ambientthermalresistance, without heatsink		$R_{\theta JA}$	26				℃/W
Junction to casethermalresistance, with heatsink		$R_{\theta JC}$	1.0				℃/W
Storage Temperature		T_{stg}	-55 ~ 150				°C
Openrating junction Temperature		T_j	-55～+150				°C

Ratings And Characteristic Curves

FIG 1.Derating Curve For Output Rectified Current

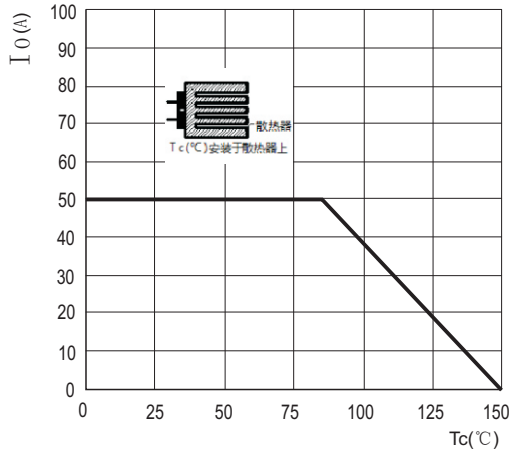


FIG2 .Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

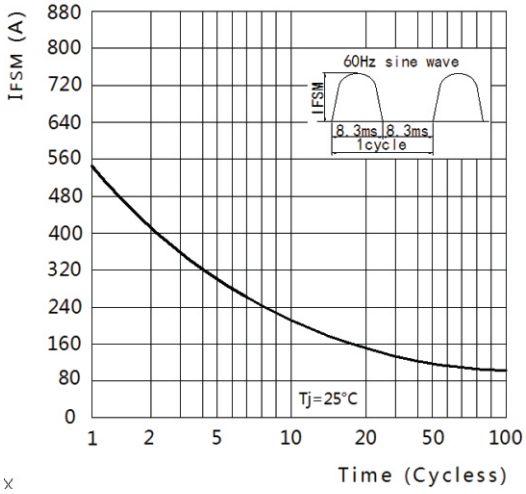


FIG3.Typical Reverse Characteristics Per Bridge Element

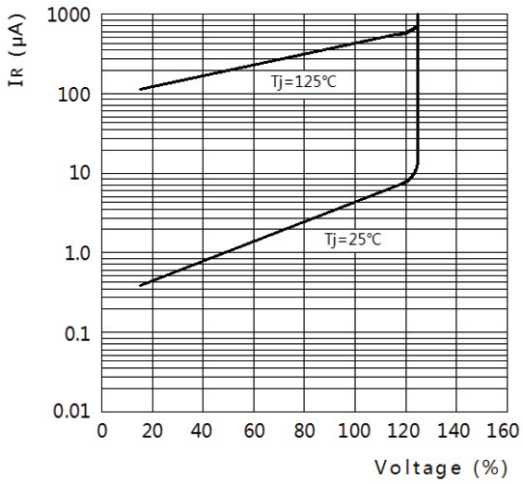
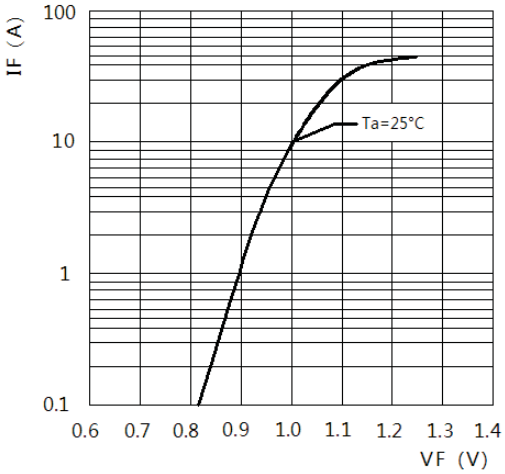
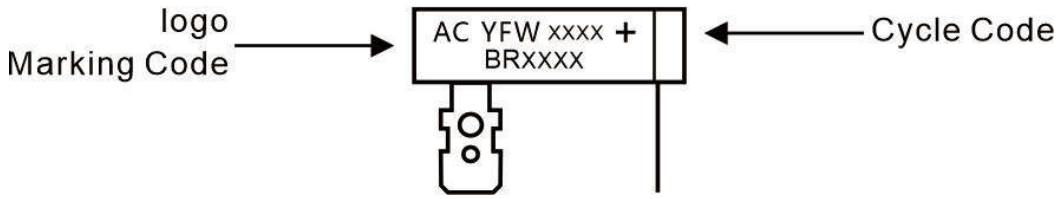


FIG4.Typical Forward Characteristics Per Bridge Element



Marking Diagram

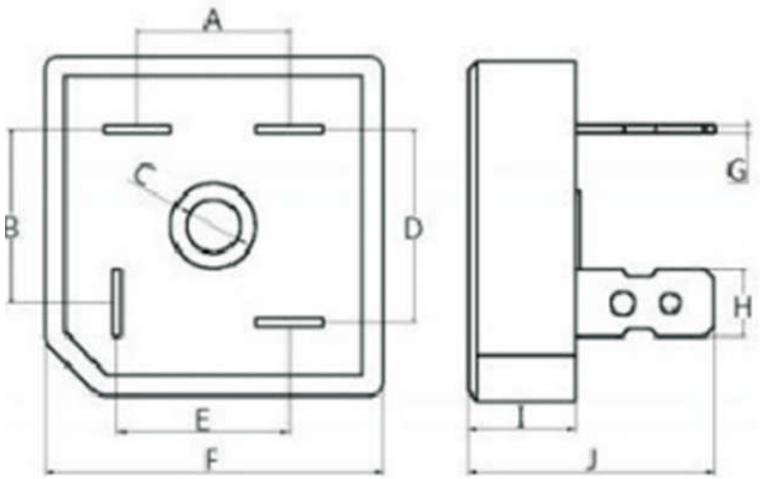


Ordering information

Package	Packing Description	Packing Quantity
BR	bulk	50PCS/Box 500PCS/Carton

Package Dimensions

BR



Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	13.90	14.90	0.547	0.587
B	15.70	16.70	0.618	0.657
C	4.50	5.50	0.177	0.217
D	18.00	19.00	0.709	0.748
E	15.70	16.70	0.618	0.657
F	31.0	32.0	1.220	1.260
G	0.60	1.00	0.024	0.256
H	6.10	6.50	0.240	0.256
I	8.50	9.50	0.335	0.374
J	22.00	24.00	0.866	0.945

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