

Single Phase Glass Passivated Bridge Rectifier

Reverse Voltage - 800V to 1600V

Forward Current - 75 A

FEATURES

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

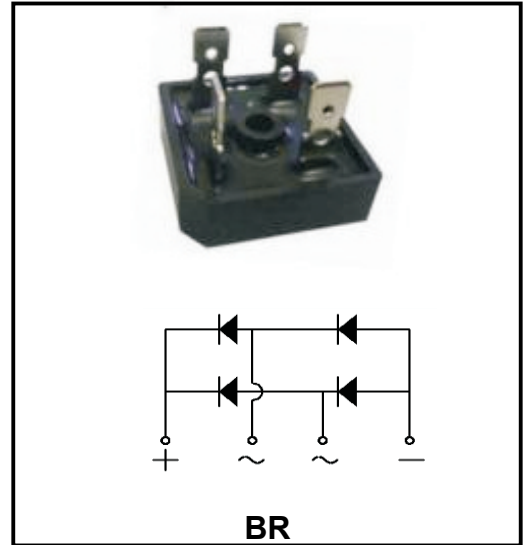
Applications

- ◆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°C unless otherwise noted



Parameter	Symbols	BR7508	BR7510	BR7512	BR7514	BR7516	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	800	1000	1200	1400	1600	V
Maximum RMS voltage	V_{RMS}	560	700	840	980	1120	V
Maximum DC Blocking Voltage	V_{DC}	800	1000	1200	1400	1600	V
Average rectified output current with heatsink $T_c=85^{\circ}C$	$I_{(AV)}$	75					A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	750					A
Rating for fusing $1ms < t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	I^2t	2250					A ² s
Forward Voltage $I_F=37.5A$	V_F	1.1					V
Peak Reverse Current $V_R=V_{RRM}$, Pulse measurement Rating of per diode	I_R	$T_j=25^{\circ}C$: 5 $T_j=125^{\circ}C$: 500					μA
Dielectric strength terminals to case AC 1 minute	V_{dis}	2.5					KV
Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	18					$^{\circ}C/W$
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	0.8					$^{\circ}C/W$
Storage Temperature	T_{stg}	-55 ~ 150					$^{\circ}C$
Operating junction Temperature	T_j	-55 ~ +150					$^{\circ}C$

Ratings And Characteristic Curves

FIG1. Derating Curve For Output Rectified Current

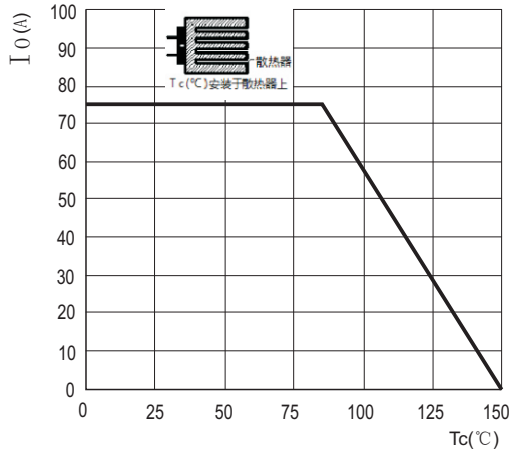


FIG2. Maximum NonRepetitive Peak Forward Surge Current Per Bridge Element

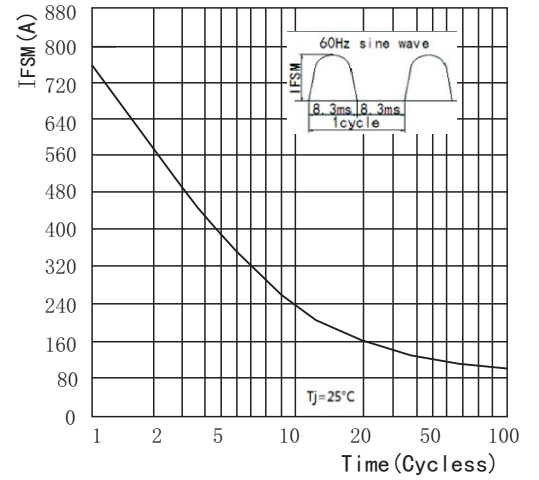


FIG3. Typical Reverse Characteristics Per Bridge Element

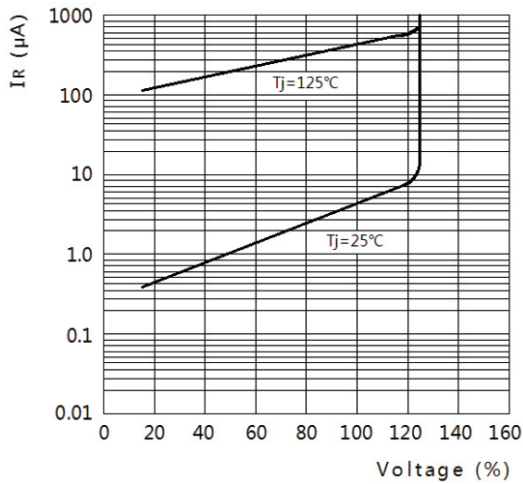
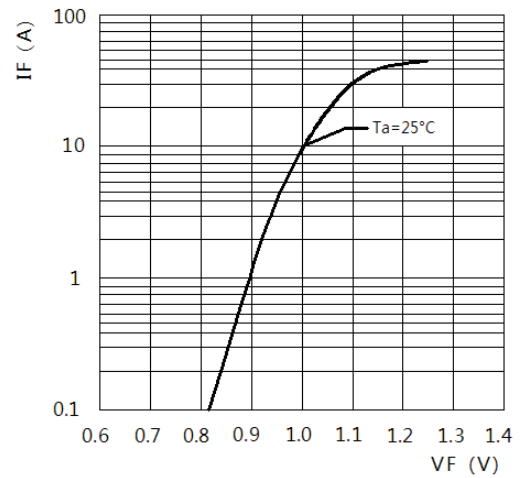
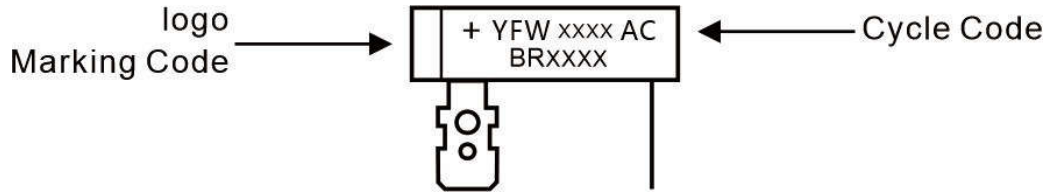


FIG4. Typical Forward Characteristics Per Bridge Element



Marking Diagram



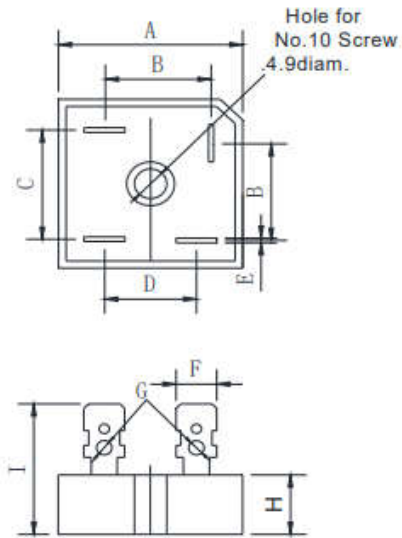
Ordering information

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

Package Dimensions

BR

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	28.2	28.8	1.11	1.13
B	15.3	17.3	0.60	0.68
C	17.1	19.1	0.67	0.75
D	13.2	15.2	0.52	0.60
E	0.75	0.85	0.03	0.03
F	6.2	6.4	0.24	0.25
G	2.3	2.5	0.09	0.10
H	10.8	11.2	0.43	0.44
I	19	/	0.75	/



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