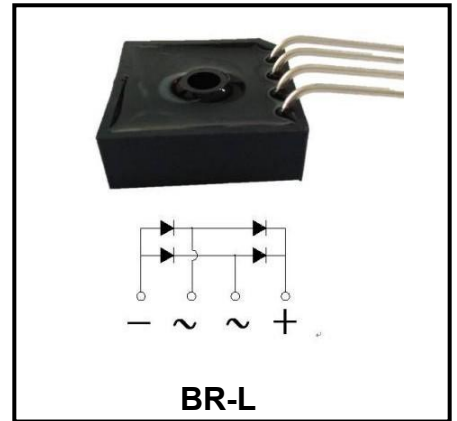


Single Phase Glass Passivated Bridge Rectifier

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-L
- ◆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	BR5006L	BR5008L	BR5010L	BR5012L	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
Average rectified output current with heatsink $T_c=85^{\circ}C$	$I_{(AV)}$	50				A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	500				A
Rating for fusing $1ms < t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	I^2t	1037				A ² s
Forward Voltage $I_F=25A$	V_F	1.1				V
Peak Reverse Current $V_R=V_{RRM}$, Pulse measurement Rating of per diode	I_R	5 500				μA
Dielectric strength terminals to case AC 1 minute	V_{dis}	2.5				KV
Junction to ambient thermal resistance, without heatsink	$R_{\theta JA}$	26				$^{\circ}C/W$
Junction to case thermal resistance, with heatsink	$R_{\theta JC}$	1.0				$^{\circ}C/W$
Storage Temperature	T_{stg}	-55 ~ 150				$^{\circ}C$
Openrating junction Temperature	T_j	-55 ~ +150				$^{\circ}C$

Characteristic Curve

FIG 1. Derating Curve For Output Rectified Current

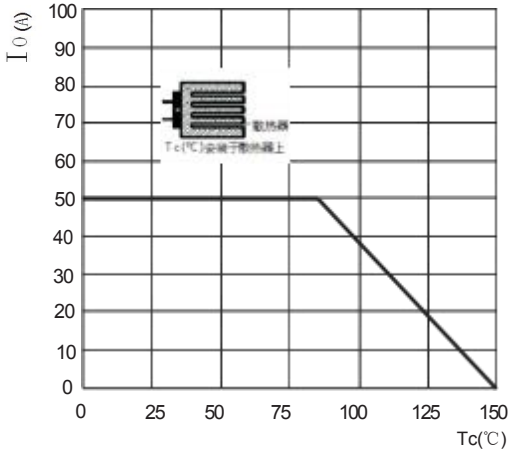


FIG3. Typical Reverse Characteristics Per Bridge Element

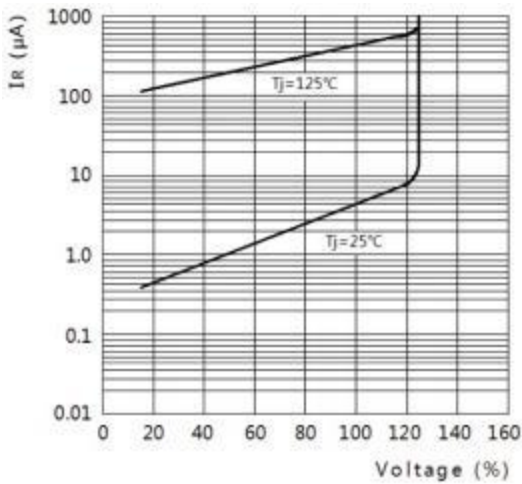


FIG2. Maximum Non-Repetitive Peak Forward Surge Current Per Bridge Element

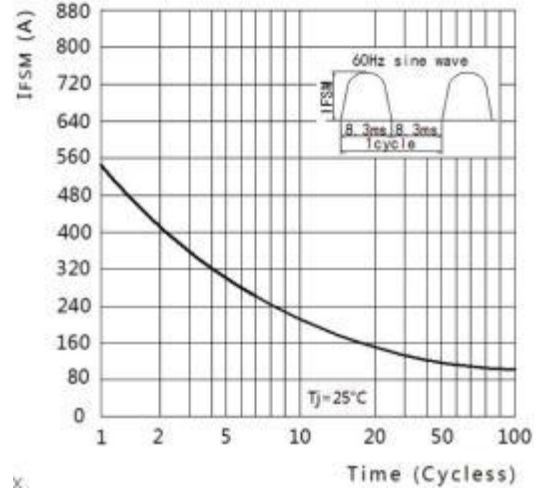
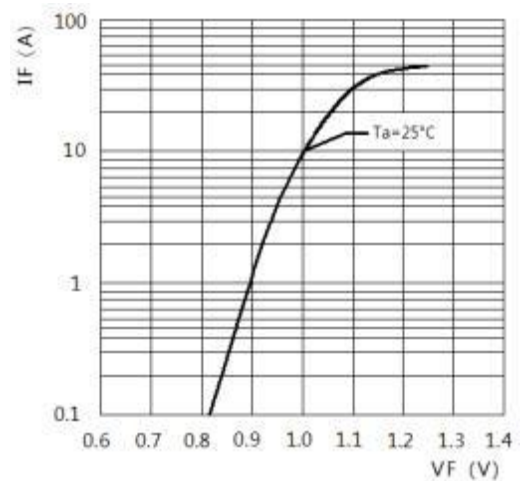


FIG4. Typical Forward Characteristics Per Bridge Element



Marking Diagram



Ordering information

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

Package Dimensions

BR-L

Dim.	Millimeter(mm)		Dimensions inInch	
	Min.	Max.	Min.	Max.
A	28.0	29.0	1.1	1.14
B	3.0	4.5	0.118	0.177
C	16.00	-	0.630	-
E	1.23	1.33	0.048	0.052
F	3.6	3.8	0.142	0.150
G	5.0	-	0.197	-
H	11.00	11.20	0.433	0.440

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