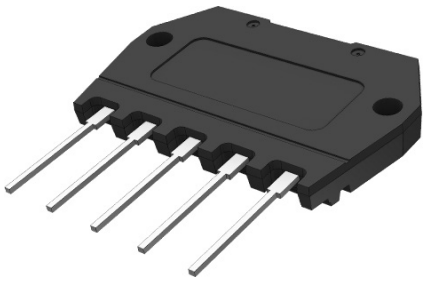
Glass Passivated 3 Phase Bridge Rectifier



Features

- Glass passivated chip, high reliability
- Low forward voltage drop
- Insulation voltage 2,500V
- Small size and light weight
- Small thermal resistance, high thermal conductivity and low temperature rise

Applications

- Power supply of DC equipment
- Input rectifier for PWM converter
- DC motor

Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

Characteristic	Symbol	HGBJ5008	HGBJ5010	HGBJ5012	HGBJ5016	Unit
Voltage Ratings						
Peak Repetitive Voltage	V_{RRM}	800	1,000	1,200	1,600	V
Peak Non-Repetitive Reverse Voltage	V_{RSM}	900	1,100	1,300	1,700	
Forward Conduction						
Maximum Average Forward Rectified Current @Tc = 110°C	$I_{F(AV)}$	50				A
Peak Forward Surge Current t=8.3ms at 60Hz	I_{FSM}	450				
I^2t Rating for Fusing	I^2t	840				A^2s
Maximum Forward Voltage drop per element at 17.5A Peak	V_F	1.1				V
Reverse peak current $V_R = V_{RRM}$ @ T_J = 25°C $V_R = V_{RRM}$ @ T_J = 150°C	I_R	5 3				µA mA
RMS Isolation Voltage from Case to Lead	V_{ISO}	2,500				V
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	0.8				°C/W
Mounting torque M3	M_d	0.8				N.m
Weight	W_t	10				g
Thermal Characteristics						
Operating Temperature Range	T_J	-55 to +150				°C
Storage Temperature Range	T_{STG}					

Notes: 1. Thermal resistance junction to case.
2. The typical data above is for reference only

Rating and Characteristic Curves

FIG.1-FORWARD CURRENT
DERATING CURVE

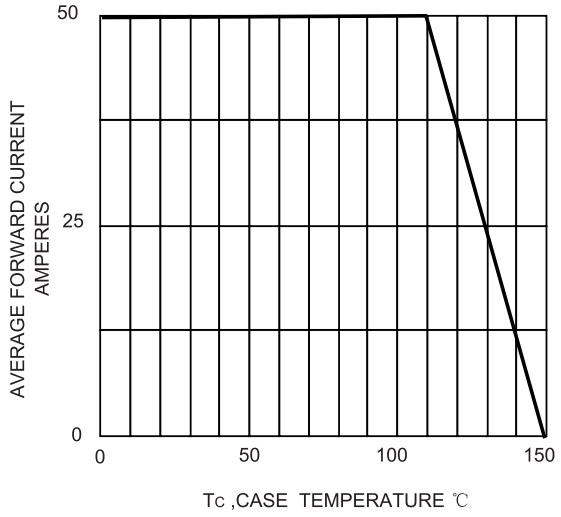


FIG.2-TYPICAL FORWARD
CHARACTERISTICS

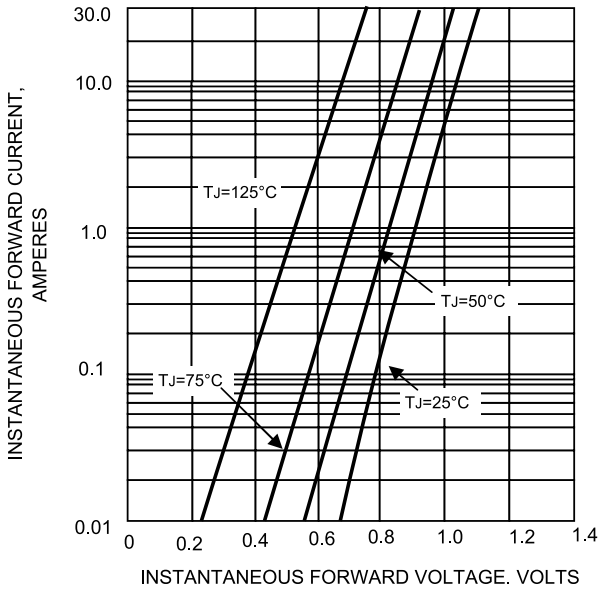


FIG.3-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

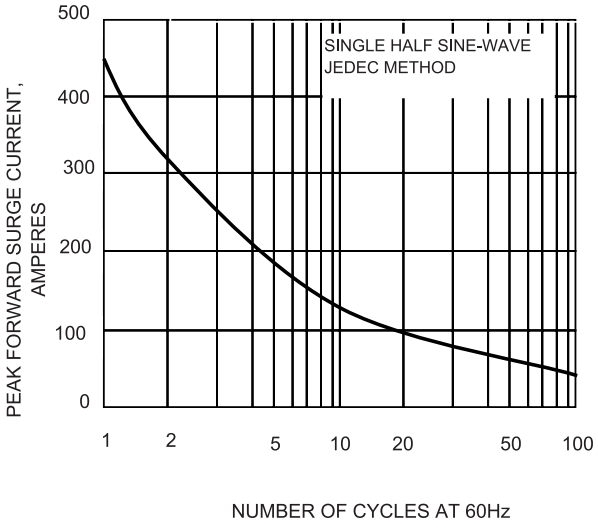
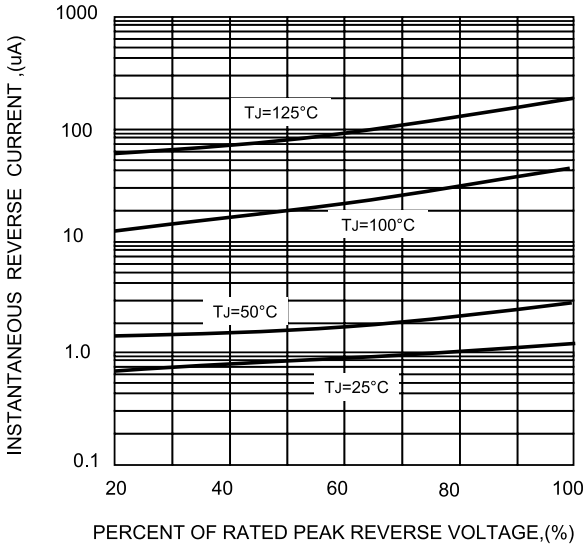
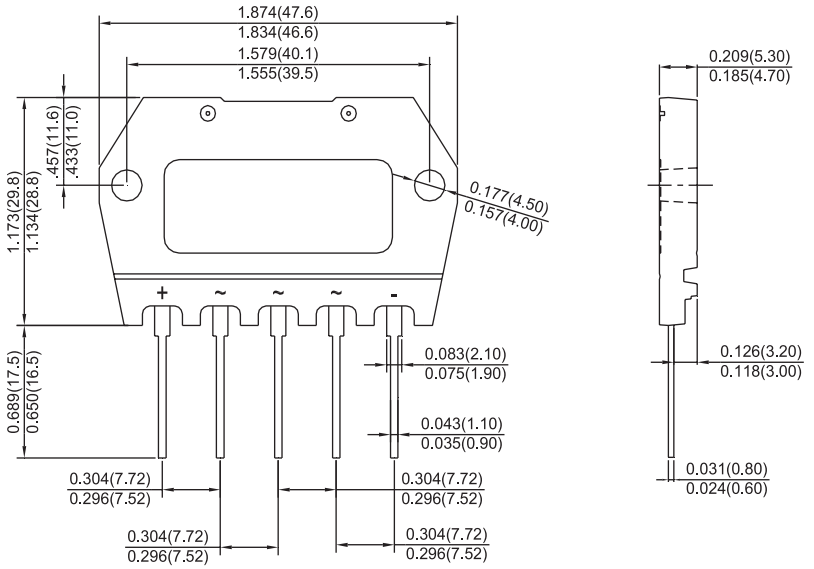


FIG.4-TYPICAL REVERSE CHARACTERISTICS



Dimension:

HGBJ



Dimensions : Inches (Millimetres)

Part Number Table

Description	Part Number
Glass Passivated 3 Phase Bridge Rectifier	HGBJ5008
	HGBJ5010
	HGBJ5012
	HGBJ5016

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.

Unikeyic Electronics

Global Electronic Components Distributor

Click to view pricing, inventory, delivery, and lifecycle information:

multicomp:

MCWF12R7150BTL SMAJ160A-13-F MCMR50V335M4X7 MCSDC0603-560KU MCWR08X39R0FTL MP006964 CMS-DF-1825 MC0603N100J201CT MC34589 MCMR08X2000FTL MP006937 MCMET 800MA 250V MCLPR50V478M30X25 CF06332T/4/10 MC0603N100F500CT MP005415 SPC19989 MUR1540 MC34747 MCSR08X3300FTL MC36427 MCAL0410A1-471KU MCSDRH73B-681MHF MC-SVT1-S06-G MC0402WGF499JTCE 2213R-24G CFS-TF-1818 MC0603B393K500CT MCMF0W4FF8202A50 MCMR06X1004FTL