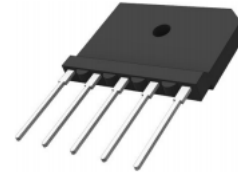


Glass Passivated Bridge Rectifiers

Reverse Voltage: 1200 to 1600 Volts

Forward Current: 50 Ampere

RoHS Device

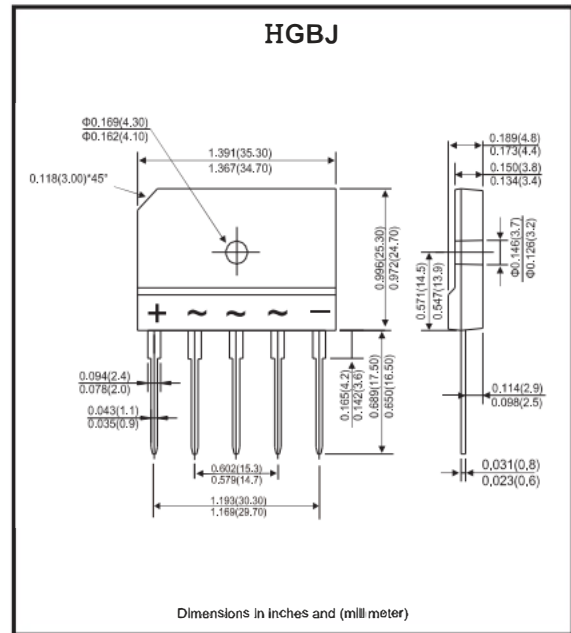


Features

- Glass passivated chip junction and high reliability.
- High reliability.
- Low forward voltage drop.
- High current capability

Mechanical Data

- Epoxy: UL 94V-0 rate flame retardant.
- Case: Molded plastic, SGBJ.
- Terminals: Solder plated, solderable per J-STD-002.
- Polarity: Symbol marking on body.



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%

Parameter	Symbol	HGBJ5012	HGBJ5016	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	1200	1600	V
Maximum RMS Voltage	V_{RMS}	840	1120	V
Maximum DC Blocking Voltage	V_{DC}	1200	1600	V
Maximum Average Forward Rectified Current @ $T_c=110^\circ\text{C}$	$I_{(AV)}$		50	A
Peak Forward Surge Current ,8,3ms Single Half Sine-Wave Super Imposed On Rated Load (JEDEC Method)	I_{FSM}		450	A
Maximum Forward Voltage per Diode at 25A DC	V_F		1.1	V
Maximum DC Reverse Current At Rate @ $T_J=25^\circ\text{C}$ DC Blocking Voltage per Diode @ $T_J=150^\circ\text{C}$	I_R		5.0 3.0	μA mA
$I^2 T$ Rating for Fusing ($t < 8.3\text{ms}$)	$I^2 t$		840	A^2s
RMS Isolation Voltage from Case to Lead	V_{ISO}		2500	V
Typical Thermal Resistance to Case	$R_{\theta JC}$		0.8	$^\circ\text{C/W}$
Operating Temperature Range	T_J		-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}		-55 to +125	$^\circ\text{C}$

Notes: 1. Thermal resistance junction to case.



Rating and Characteristics Curves

Fig.1 - Derating Curve Output Rectified Current

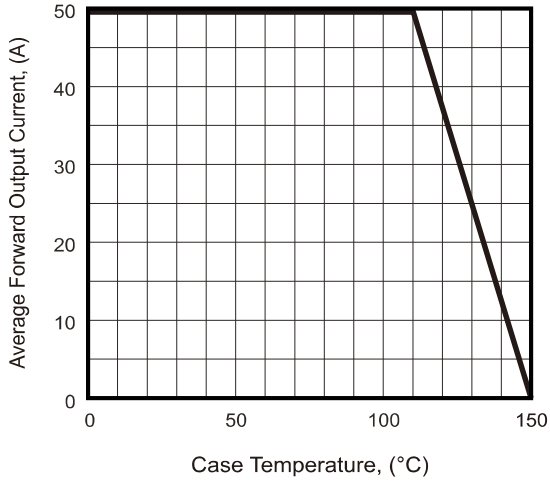


Fig.2 - Maximum Forward Surge Current

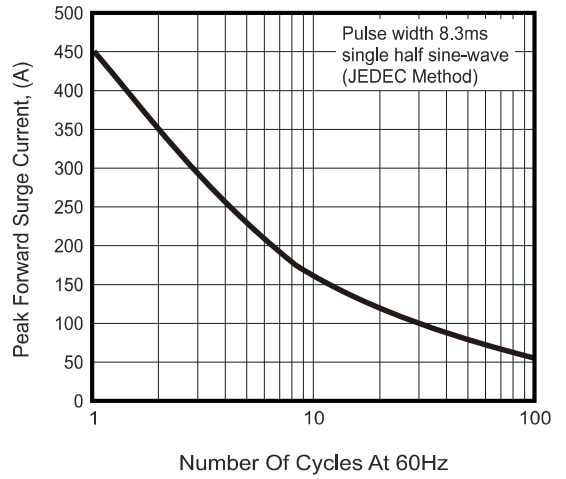


Fig.3 - Typical Forward Characteristics

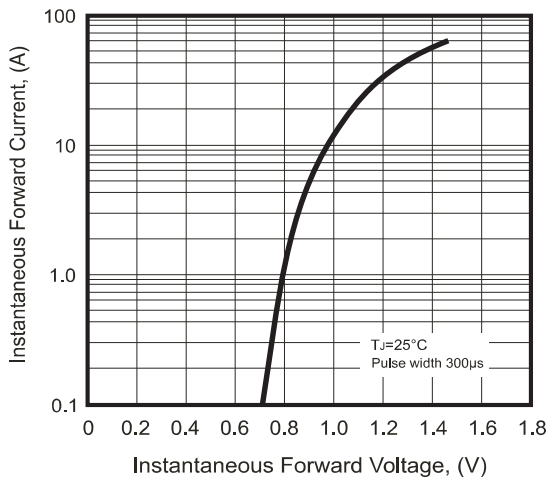
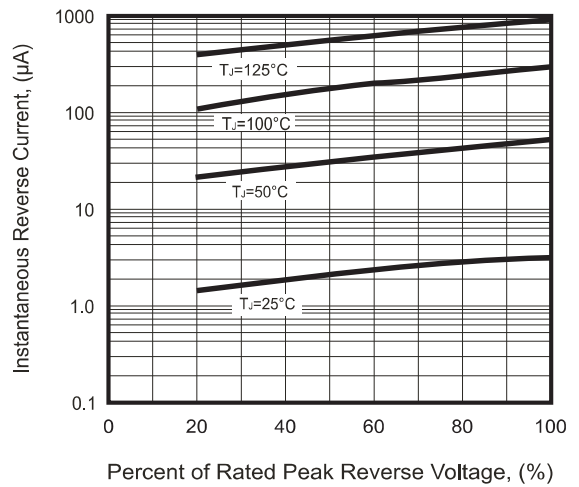
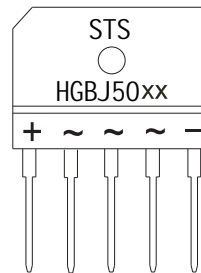


Fig.4 - Typical Reverse Characteristics



Marking Code

Part Number	Marking Code
HGBJ5012	HGBJ5012
HGBJ5016	HGBJ5016



XX = Product type marking code

STS = Longmacro Logo

Standard Packaging

Case Type	BULK PACK	
	Box (pcs)	Carton (pcs)
HGBJ	100	1000