

SuperPlanar™ Bridge Rectifiers

GBL2J--GBL2K

Features

- Planar passivated chips
- Ultra low leakage reverse current
- High temperature performance
- High surge current capability
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260°C/10 seconds
- RoHS Compliant



Mechanical Data

- Case: GBL molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750,
- Mounting position: Any

Maximum Ratings (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Characteristic	Symbol	GBL2J	GBL2K	Units
Peak repetitive reverse voltage	V_{RRM}	600	800	V
RMS reverse voltage	V_{RMS}	420	560	V
DC blocking voltage	V_{DC}	600	800	V
Maximum average forward output current	$I_{F(AV)}$	2.0		A
Peak forward surge current, 8.3ms single half-sine-wave	I_{FSM}	70		A
I^2t Rating for fusing	I^2t	20		A^2s

Thermal Characteristics

Parameter	Symbol	GBL2J	GBL2K	Units
Typical thermal resistance per leg (Note 1)	$R_{\theta JA}$	36		$^\circ\text{C}/\text{W}$
	$R_{\theta JC}$	8.7		
Operating junction temperature range	T_J	-55 ---- +150		$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ---- +150		$^\circ\text{C}$

Note:

- (1) Unit case mounted on aluminum plate heatsink
- (2) Units mounted on PCB without heatsink

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Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions		Typ.	Max.	Units
Maximum instantaneous forward voltage	V_F	$I_F=1.0\text{A}$ Per Diode		0.91	0.95	V
		$I_F=2.0\text{A}$ Per Diode		0.95	1.0	
Maximum Reverse current	I_R	Rated V_R , Per Diode	@ $T_A=25^\circ\text{C}$	0.1	1.0	μA
			@ $T_A=150^\circ\text{C}$	20	80	

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Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

Fig.1-Forward Current Derating Curve

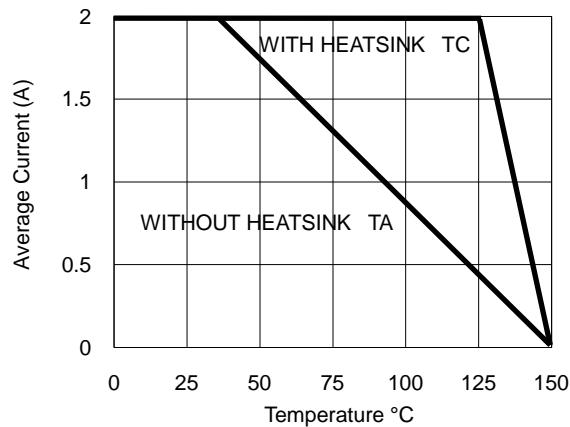


Fig.2- Surge Current Derating Curve

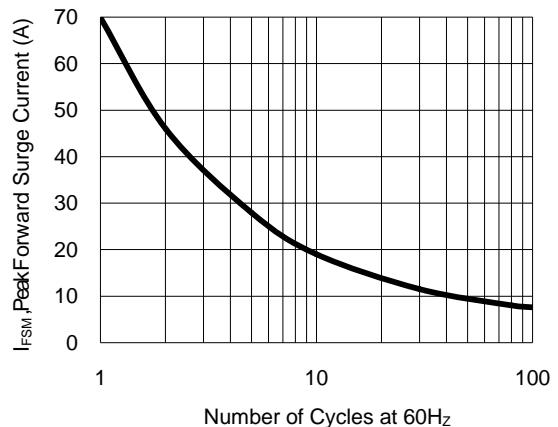


Fig.3- Typical Forward Voltage Characteristic

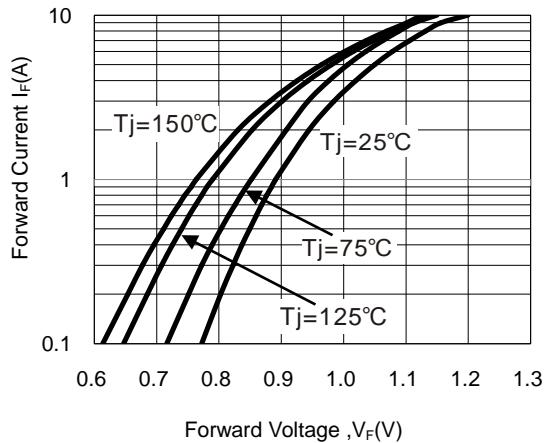
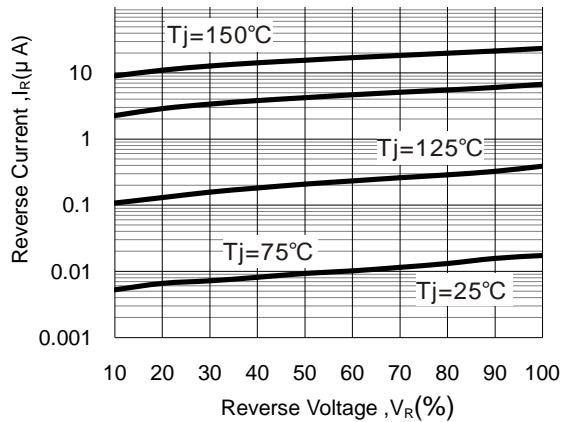


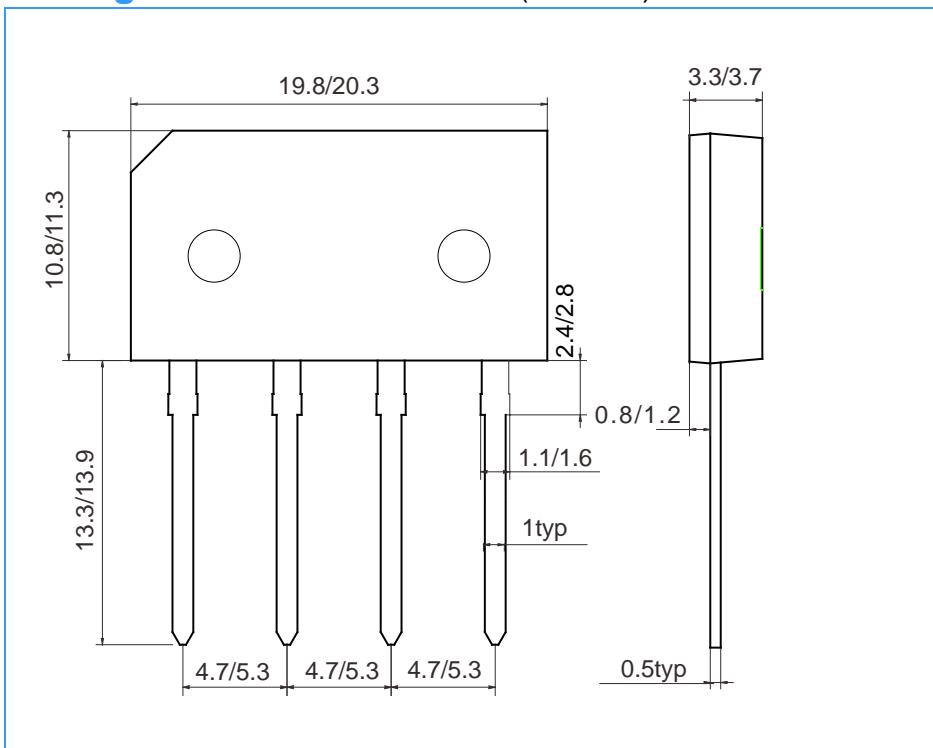
Fig.4- Typical Reverse Characteristic



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Package Outline Dimensions(unit:mm)



Ordering Information

Part No.	Marking	Package
GBL2J	GBL2J	GBL
GBL2K	GBL2K	GBL