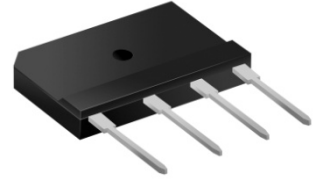


SuperPlanar™ Bridge Rectifiers

GBJ6J--GBJ6K

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: GBJ 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°C unless otherwise specified)

Characteristic		Symbol	GBJ6J	GBJ6K	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)}	6.0		A
Peak forward surge current, 8.3ms single half-sine-wave	@T _J = 25°C	I _{FSM}	170		A
I ² t Rating for fusing	@T _J = 25°C	I ² t	120		A ² s

Thermal Characteristics

Parameter	Symbol	GBJ6J	GBJ6K	Units
Typical thermal resistance (Note 1,Note2)	R _{θJA} (2)	25.2		°C /W
	R _{θJC} (1)	1.5		
Operating junction temperature range	T _J	- 55 ---- + 150		°C
Storage temperature range	T _{STG}	- 55 ---- + 150		°C

Note:

- (1) Unit case mounted on 65mm x 50mm x2.4mm aluminum plate heatsink
- (2) Units mounted on PCB without heatsink

SuperPlanar™ Bridge Rectifiers
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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	$I_F=3.0\text{A}$ Per Diode		0.91	0.95	V
		$I_F=6.0\text{A}$ Per Diode		0.95	1.0	
Maximum Reverse current	I_R	Rated V_R , Per Diode	@ $T_A=25^\circ\text{C}$	0.2	1.0	μA
			@ $T_A=150^\circ\text{C}$	40	100	

SuperPlanar™ Bridge Rectifiers

GBJ6J--GBJ6K

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

Fig.1-Forward Current Derating Curve

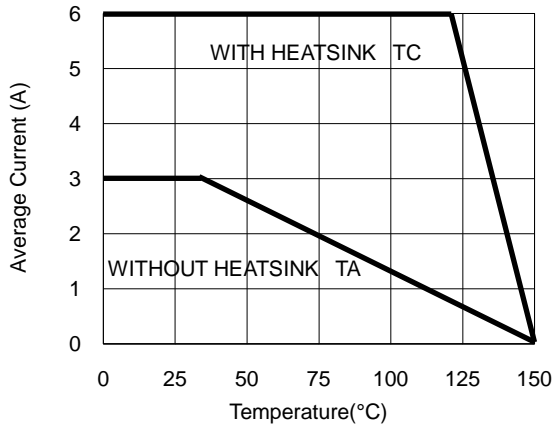


Fig.2- Surge Current Derating Curve

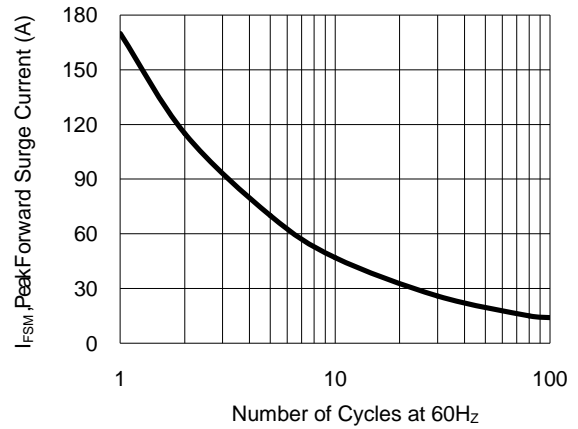


Fig.3- Typical Forward Voltage Characteristic

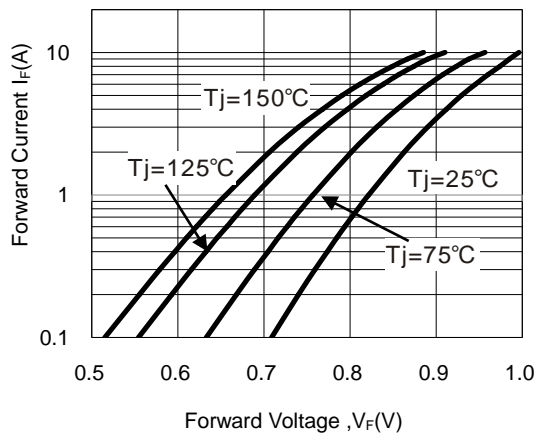
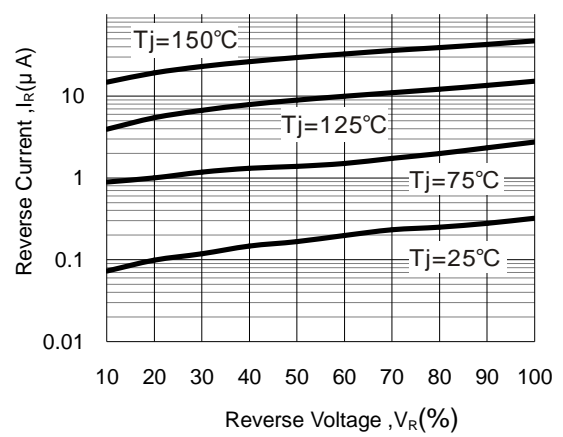


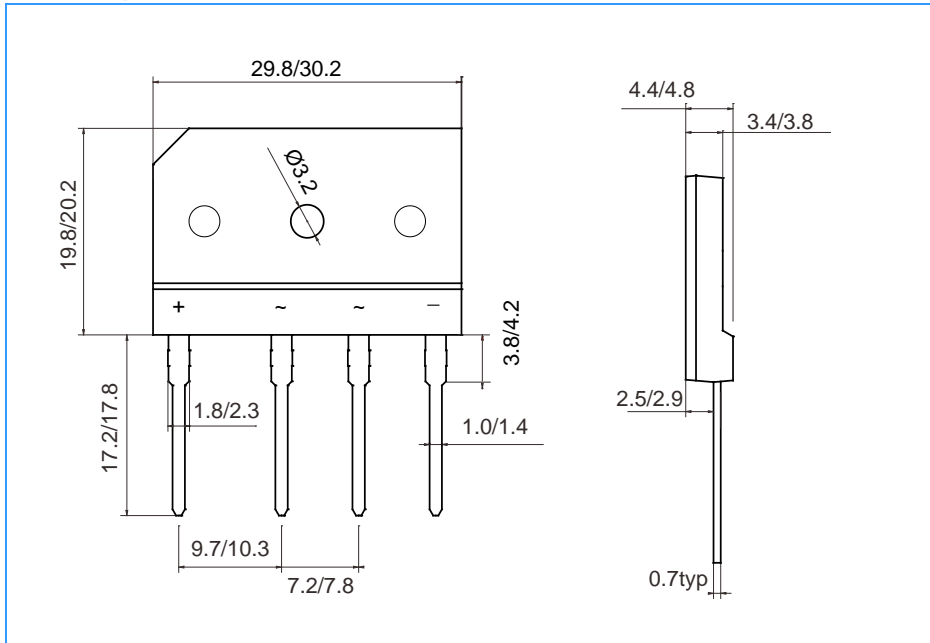
Fig.4- Typical Reverse Characteristic



SuperPlanar™ Bridge Rectifiers

GBJ6J--GBJ6K

Package Outline Dimensions(unit:mm)



Ordering Information

Part No.	Marking	Package
GBJ6J	GBJ6J	GBJ
GBJ6K	GBJ6K	GBJ