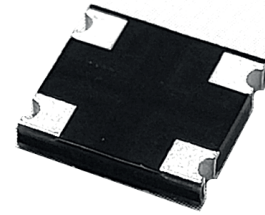


Features

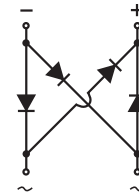
- Glass passivated chip
- Low power loss and high efficiency
- High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0



K6

Mechanical Data

- Case: Packed with FRP substrate and epoxy underfilled
- Terminals : Pure tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
- Polarity : Laser marking symbols
- Weight : 0.11 gram



Schematic Diagram

Applications

- AC/DC power supply
- Communication equipment

Absolute Maximum Ratings (T_A=25°C unless otherwise noted)

Parameter	Symbol	GSBG02K6J	GSBG02K6K	GSBG02K6M	Unit
Repetitive Peak Reverse Voltage	V _{RRM}	600	800	1000	V
Average Forward Current	I _{F(AV)}	2.0			A
Peak Forward Surge Current (8.3ms Single Half Sine-Wave)	I _{FSM}	60			A
Thermal Resistance Junction to Ambient ¹	R _{th(JA)}	95			°C/W
Thermal Resistance Junction to Lead ¹	R _{th(JL)}	15			
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +175			°C

Note:

1. Mounted on P.C.B. with 5.0 x 5.0mm copper pads.

Electrical Characteristics (T_A=25°C unless otherwise specified)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =2.0A	-	0.94	0.96	V
Repetitive Peak Reverse Current	I _{RRM}	V _R =Max.V _{RRM} , T _A =25°C	-	0.08	5	uA
Current Squared Time	I ² t	t < 8.3ms, T _A =25°C	-	14.9	-	A ² s
Junction Capacitance	C _J	V _R =4V, F=1.0MHz	-	35	-	pF

Ratings and Characteristic Curves

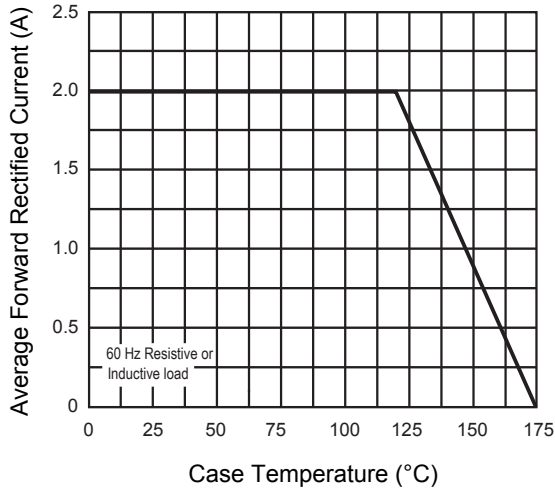


Figure 1. Forward Current Derating Curve

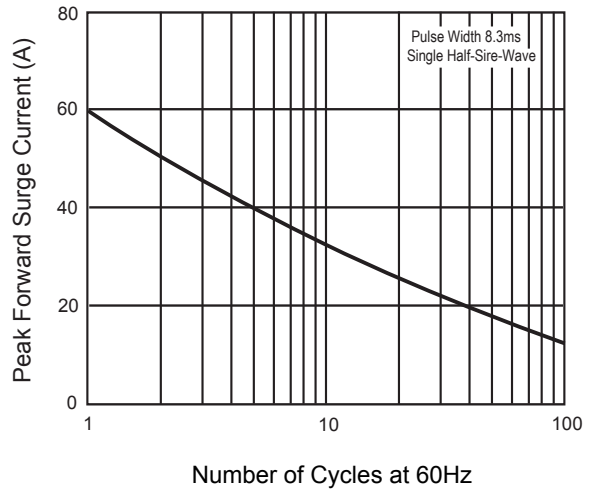


Figure 2. Maximum Non-Repetitive Peak Forward Surge Current

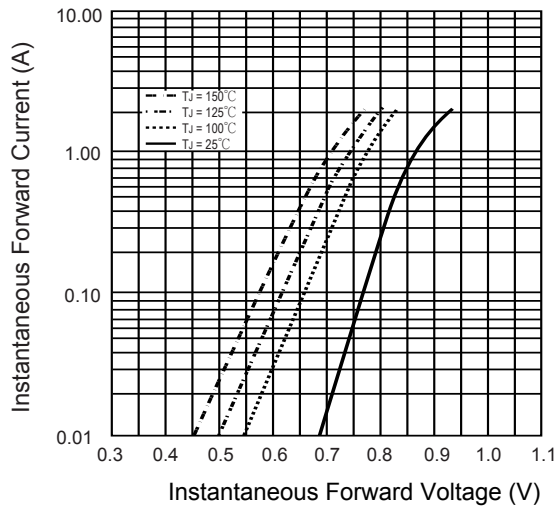


Figure 3. Typical Instantaneous Forward Characteristics

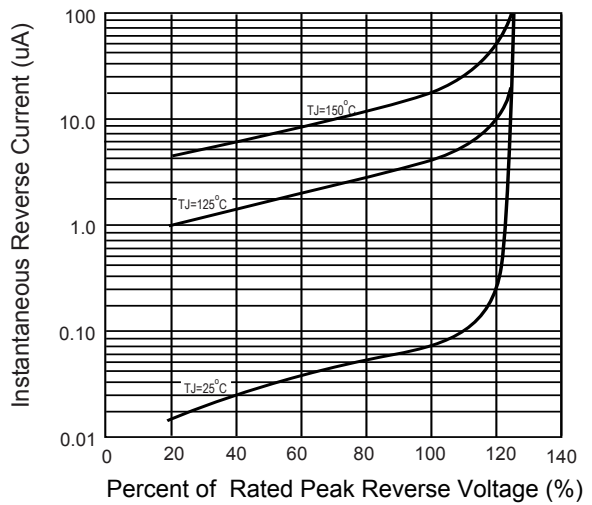


Figure 4. Typical Reverse Characteristics Per Bridge Element

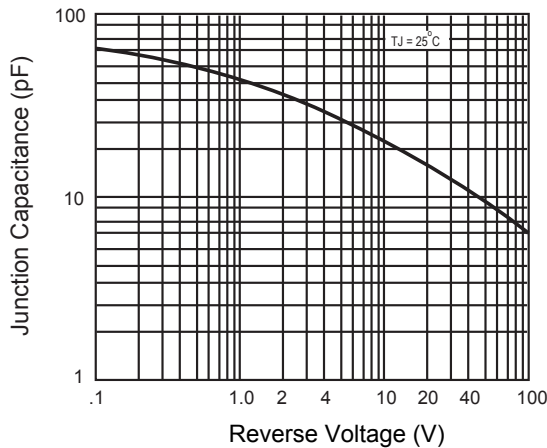


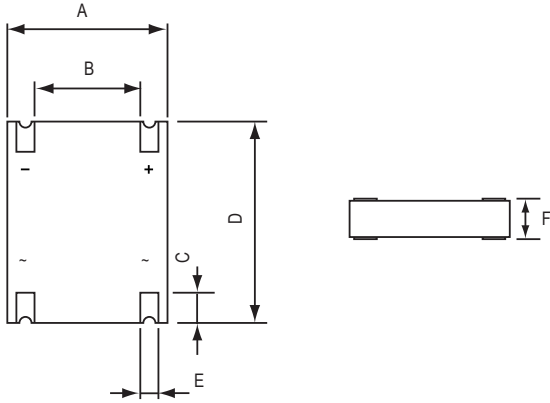
Figure 5. Typical Junction Capacitance

GSBG02K6J thru GSBG02K6M

Bridge Rectifiers

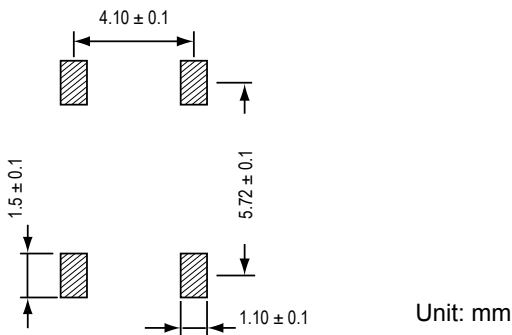
Reverse Voltage 600V to 1000V Forward Current 2.0A

Package Outline Dimensions (K6)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	5.20	5.40	0.205	0.213
B	3.25	3.35	0.128	0.132
C	1.00	1.20	0.039	0.047
D	5.70	5.90	0.224	0.232
E	0.80	1.00	0.031	0.039
F	1.05	1.35	0.041	0.053

Recommended Pad Layout



Order Information

Device	Package	Marking	Quantity	HSF Status
GSBG02K6J	K6	2K6J	5,000pcs / Reel	RoHS Compliant
GSBG02K6K	K6	2K6K	5,000pcs / Reel	RoHS Compliant
GSBG02K6M	K6	2K6M	5,000pcs / Reel	RoHS Compliant