

Features

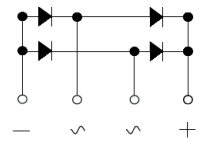
- Plastic package has underwriters laboratory flammability classification 94V-0
- Glass passivated chip junction
- High current capability
- Low forward voltage drop
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Component in accordance to RoHS 2011 65/EU



Package: KBU

Mechanical Data

- Case: KBU molded plastic body
- Terminals: Plated leads solderable per MIL-STD-750, method 2026
- Mounting position: Any



Schematic Diagram

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%.)

Parameters		Symbols	GS KBU8B	GS KBU8D	GS KBU8G	GS KBU8J	GS KBU8K	GS KBU8M	Units
Maximum Repetitive Peak Reverse Voltage		V _{RRM}	100	200	400	600	800	1000	V
Maximum RMS Voltage		V _{RMS}	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V _{DC}	100	200	400	600	800	1000	V
Average Rectified Output Current	T _A =25°C	I _O	2.8						A
	T _C =115°C		8.0						
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)		I _{FSM}	150						A
Rating for Fusing (t<8.3ms)		I ² t	93						A ² s
Maximum Instantaneous Forward Voltage at 8.0A DC		V _F	1.1						V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _A =25°C	I _R	10						μA
	T _A =125°C		500						
Typical Thermal Resistance, Junction-Ambient ¹		R _{θJA}	9						°C/W
Typical Thermal Resistance, Junction-Case ²		R _{θJC}	3.70						°C/W
Operating Temperature Range		T _J	-55 to +150						°C
Storge Temperature Range		T _{STG}	-55 to +150						°C

Notes:

1. Units mounted in free air, on heat sink, P.C.B. at 0.375" (9.5mm) lead length with 0.5×0.5 (12×12mm) copper areas.
2. Units mounted on a aluminum plate heat sink.

Ratings and Characteristics Curves

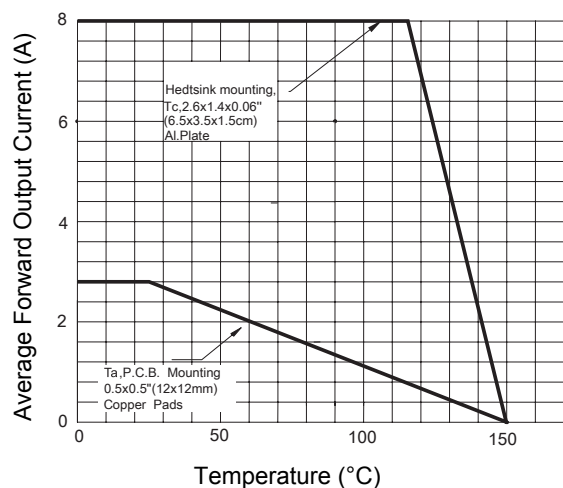


Figure 1. I_o -T Curve

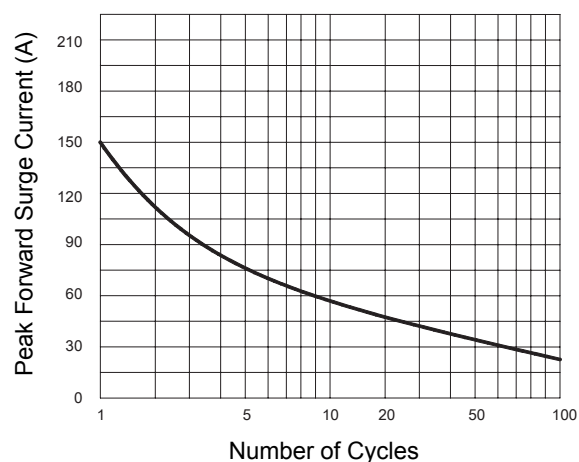


Figure 2. Surge Forward Current Capability

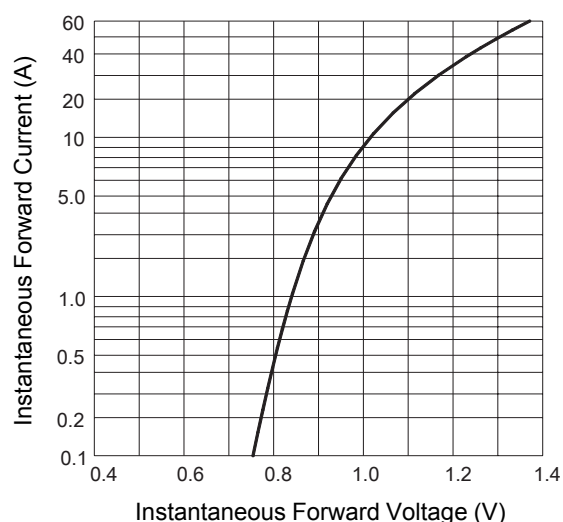


Figure 3. Instantaneous Forward Voltage

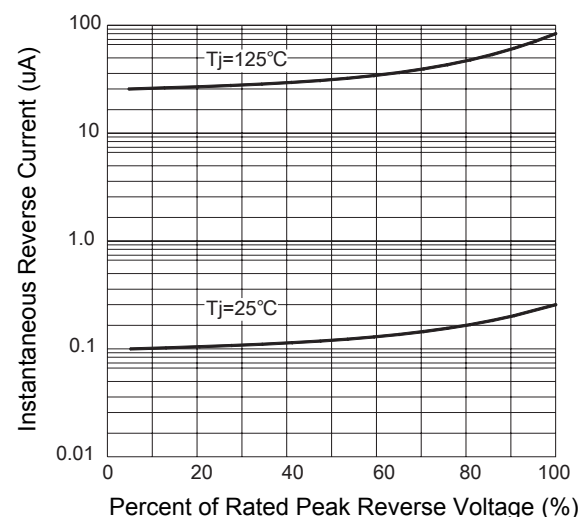
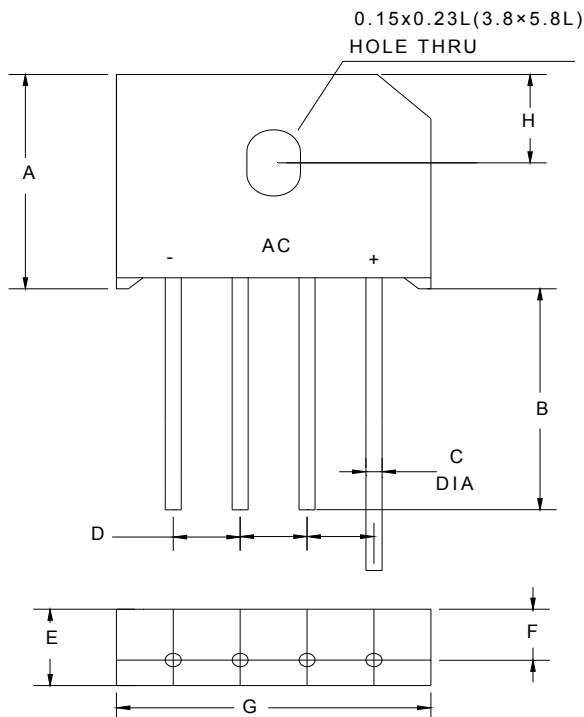


Figure 4. Typical Reverse Characteristics

Package Outline Dimensions (KBU)



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	18.80	19.80	0.740	0.780
B	20.00	-	0.789	-
C	1.20	1.30	0.048	0.052
D	4.60	5.60	0.181	0.220
E	6.80	7.10	0.268	0.280
F	4.60	5.00	0.181	0.197
G	22.70	23.70	0.895	0.935
H	8.2 REF		0.323 REF	

Order Information

Device	Package	Marking	Carrier	Quantity
GSKBU8B	KBU	KBU801	Box	400pcs / Box
GSKBU8D	KBU	KBU802	Box	400pcs / Box
GSKBU8G	KBU	KBU804	Box	400pcs / Box
GSKBU8J	KBU	KBU806	Box	400pcs / Box
GSKBU8K	KBU	KBU808	Box	400pcs / Box
GSKBU8M	KBU	KBU810	Box	400pcs / Box