

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 50\text{ V} - 400\text{ V}$

$I_O = 2\text{ A}$

Features

- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Built-in printed circuit board stand-offs
- High temperature soldering guaranteed 265°C/ 10 seconds
- High case dielectric strength
- Types from 50 V to 400 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

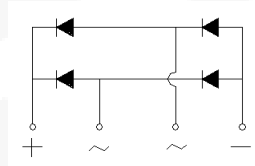
Case: Reliable low cost construction

Terminals: Plated leads, solderable per MIL-STD-202, Method 208

Mounting position: Any

Weight: 0.065 oz, 2.2 grams

KBP Package



Maximum ratings at $T_j = 25\text{ °C}$, unless otherwise specified

Parameter	Symbol	Conditions	KBP2005G	KBP201G	KBP202G	KBP204G	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics at $T_j = 25\text{ °C}$, unless otherwise specified

Single phase, half sine wave, 60 Hz, resistive or inductive load
For capacitive load derate current by 20%

Parameter	Symbol	Conditions	KBP2005G	KBP201G	KBP202G	KBP204G	Unit
Maximum average forward rectified current	I_O	$T_a = 50\text{ °C}$	2	2	2	2	A
Peak forward surge current	I_{FSM}	single sine-wave	60	60	60	60	A
Maximum instantaneous forward voltage per leg	V_F	$I_F = 2\text{ A}$	1.1	1.1	1.1	1.1	V
Maximum reverse current at rated DC blocking voltage per leg	I_R	$T_a = 25\text{ °C}$	10	10	10	10	μA
		$T_a = 100\text{ °C}$	500	500	500	500	

Thermal characteristics

Parameter	Symbol	Conditions	KBP2005G	KBP201G	KBP202G	KBP204G	Unit
Thermal resistance	$R_{\theta JL}$		25	25	25	25	°C/W

FIG.1-MAXIMUM FORWARD CURRENT DERATING CURVE

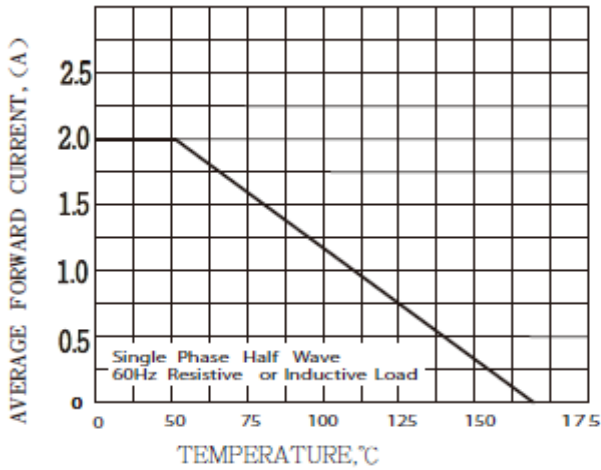


FIG.2-MAXIMUM NON-RECURRENTIVE FORWARD SURGE CURRENT

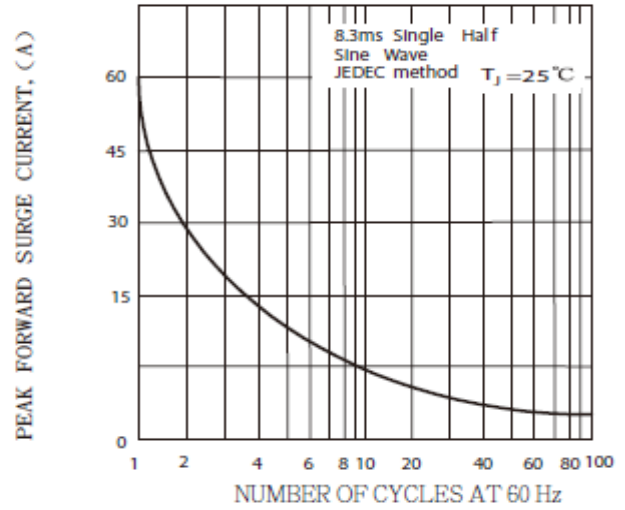


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

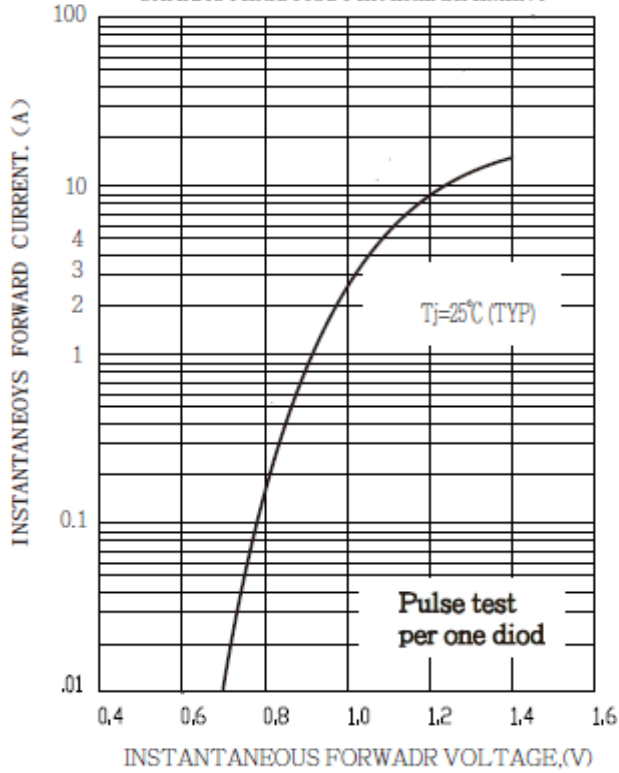
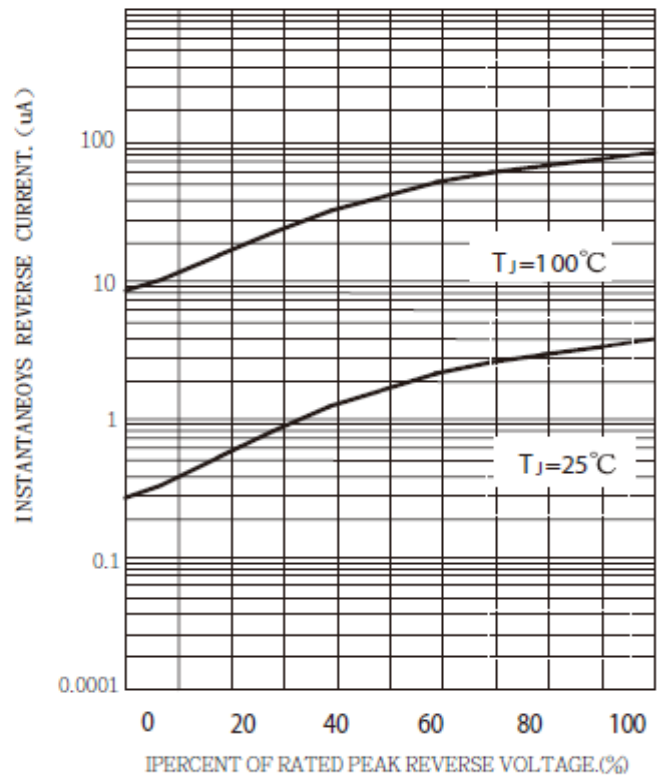
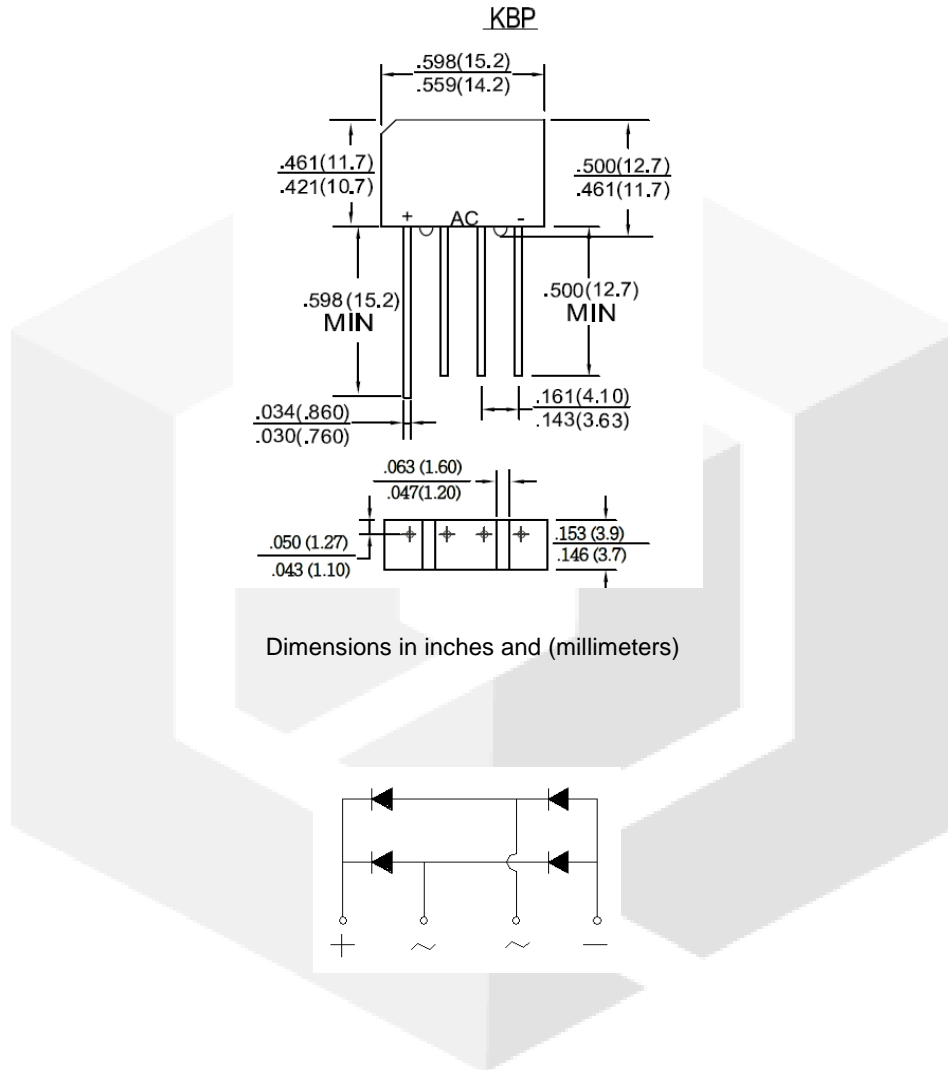


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[GeneSiC Semiconductor:](#)

[KBP2005G](#)