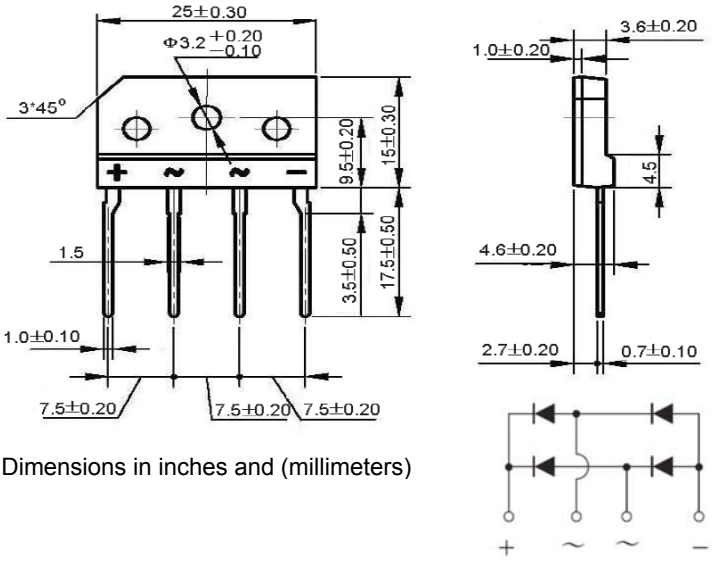
KBJ606-R-HAF

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER
REVERSE VOLTAGE: 600 V
FORWARD CURRENT: 6 A

Features
- Epoxy Resin material compliant with 94V-0 standards of UL Material Flammability
- Single in-line DIP package，compact size
- Low forward voltage, high forward current capacitive
- Small packaging size, high heat-Conducting performance
- High surge current capability
- Halogen and Antimony Free(HAF), RoHS compliant



Dimensions in inches and (millimeters)

Mechanical data
- Case:Molded plastic, KBJ
- Epoxy: UL 94V-0 rate flame retardant
- Mounting Position: Any

Absolute Maximum Ratings and Characteristics
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	KBJ606	Units
	Marking	KBJ606	-
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Voltage	V_{RMS}	420	V
Maximum DC Blocking Voltage	V_{DC}	600	V
Maximum Average Forward Rectified Current with Heatsink [1] T_C = 100°C	$I_{(AV)}$	6	A
Peak Forward Surge Current, 10 ms Single Half-Sine -Wave superimposed on rated load (JEDEC Method)	I_{FSM}	150	A
Current Squared Time at 1 ms ≤ t ≤ 10 ms	I^2t	80	A^2S
Maximum Forward Voltage at 3 A DC	V_F	1.1	V
Maximum Reverse Current at T_A = 25°C at Rated DC Blocking Voltage T_A = 125°C	I_R	5 500	μA
Typical Thermal Resistance, without heatsink [1]	$R_{\theta JA}$	30	°C/W
Typical Thermal Resistance, with heatsink [2]	$R_{\theta JC}$	5.5	°C/W
Operating and Storage Temperature Range	T_J, T_{Stg}	- 45 to + 150	°C

[1] Install on PCB with stated size heatsink

[2] Install on PCB without heatsink

Fig.1: Current Derating Curve

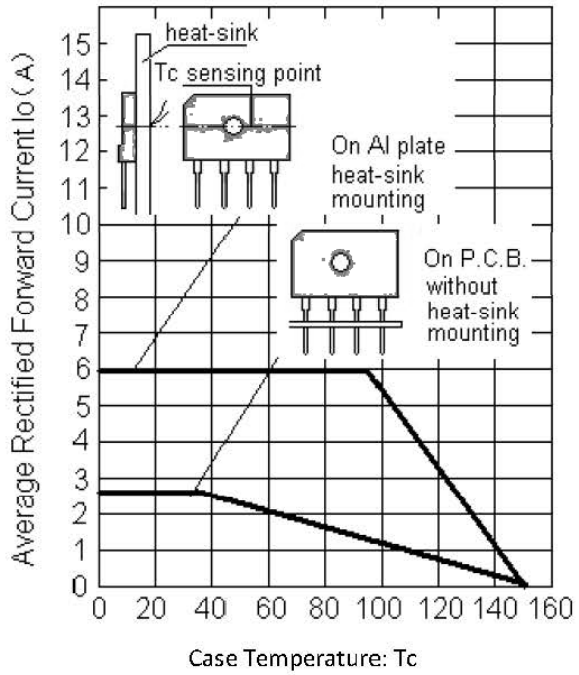


Fig.2: Typical Reverse Characteristics

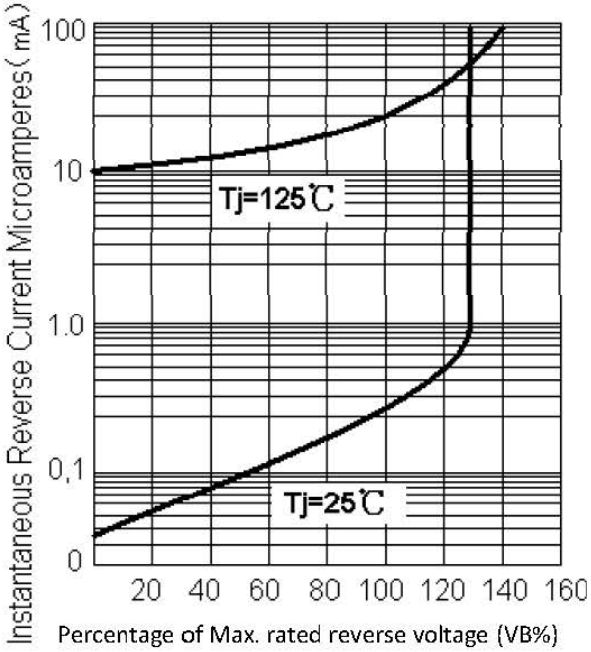


Fig.3: Max. Surge Current

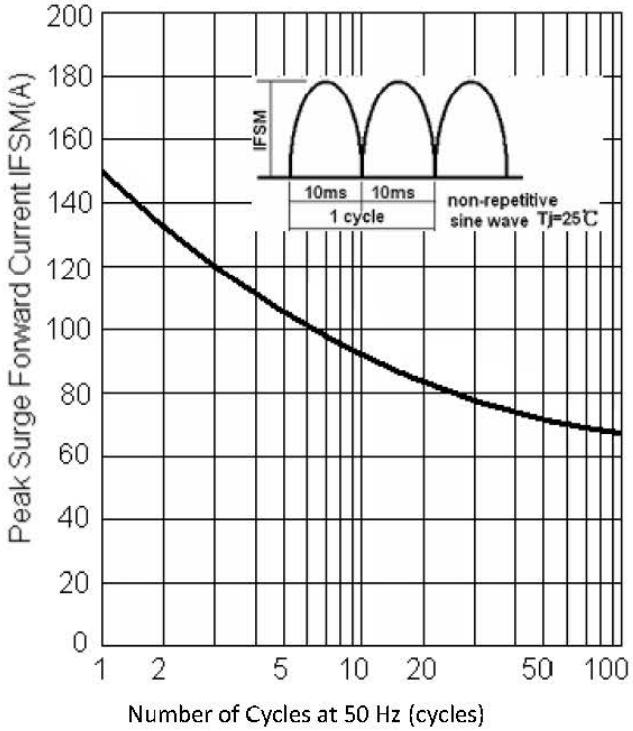


Fig.4: Rated Forward Features