KBJ4005 THRU KBJ410

BRIDGE RECTIFIER

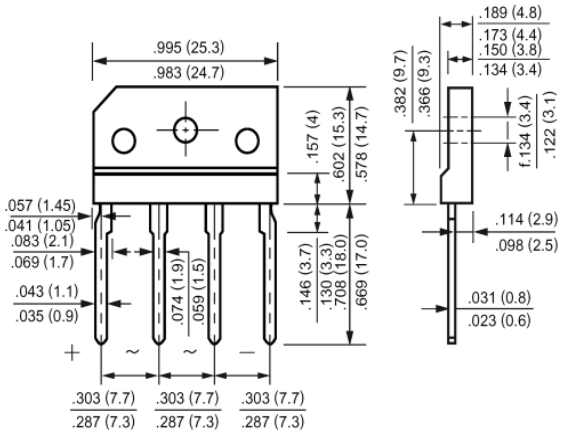
FEATURES

· Glass passivated chip junction
· Reliable low cost construction utilizing molded plastic technique
· Ideal for printed circuit board
· Low forward voltage drop
· Low reverse leakage current
· High surge current capability

MECHANICAL DATA

Case: Molded plastic, KBJ
Epoxy: UL 94V-O rate flame retardant
Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
Mounting position: Any
Weight: 0.16ounce, 4.6gram

KBJ



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase, half wave, 60H_Z, resistive or inductive load.
For capacitive load, derate current by 20%.

	Symbols	*KBJ4005*	*KBJ401*	*KBJ402*	*KBJ404*	*KBJ406*	*KBJ408*	*KBJ410*	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	**Volts**
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	**Volts**
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	**Volts**
Maximum Average Forward Rectified Current at T_C=115℃	$I_{(AV)}$	4.0							**Amp**
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80							**Amp**
Maximum Forward Voltage at 2.0A DC and 25℃	V_F	1.0							**Volts**
Maximum Reverse Current at T_A=25℃	I_R	5.0							**uAmp**
at Rated DC Blocking Voltage T_A=125℃		500							
Typical Junction Capacitance (Note 1)	C_J	40							**pF**
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	5.5							**℃/W**
Operating and Storage Temperature Range	T_J, Tstg	-55 to +150							**℃**

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance from Junction to Case with Device Mounted on 75mm x 75mm x 1.6mmCu Plate Heatsink.

Characteristic Curves (T_A=25 ℃ unless otherwise noted)

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

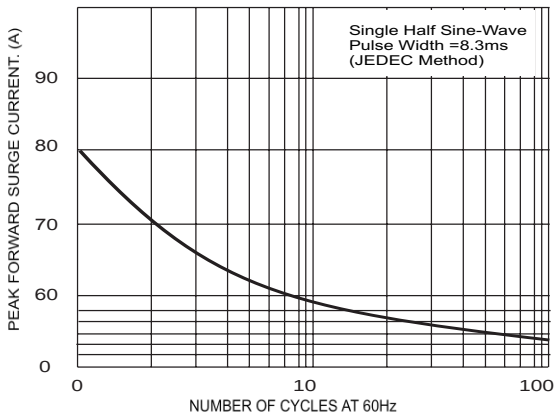


FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE PER BRIDGE ELEMENT

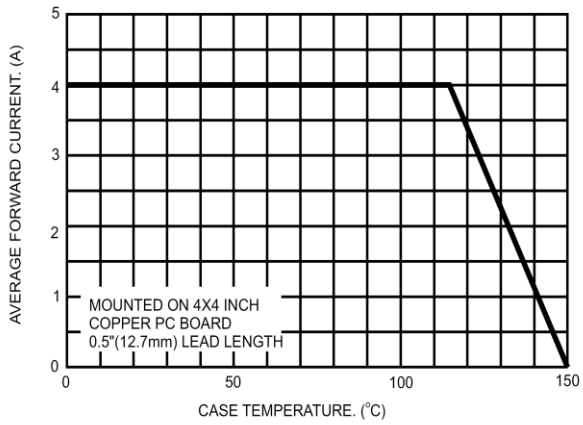


FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

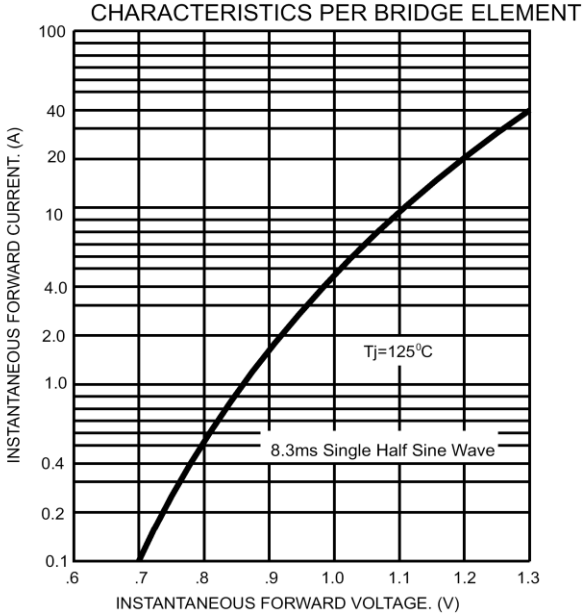


FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT