KBJ4005 THRU KBJ410

GLASS PASSIVATED SINGLE-PHASE BRIDGE RECTIFIER

REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 4.0 AMPERE

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
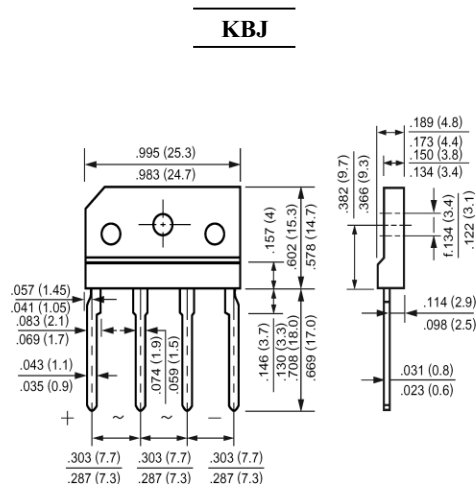· High surge current capability

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}	120							Amp
Maximum Forward Voltage at 2.0A DC and 25℃	V_F	1.0							Volts
Maximum Reverse Current at T_A=25℃ at Rated DC Blocking Voltage T_A=125℃	I_R	5.0 500							uAmp
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.

RATINGS AND CHARACTERISTIC CURVES

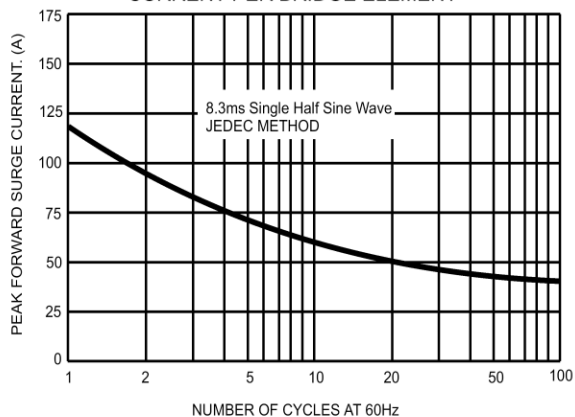FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

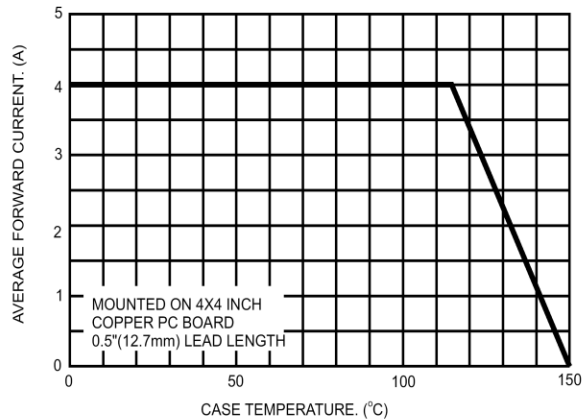FIG.2- MAXIMUM FORWARD CURRENT DERATING CURVE PER BRIDGE ELEMENT
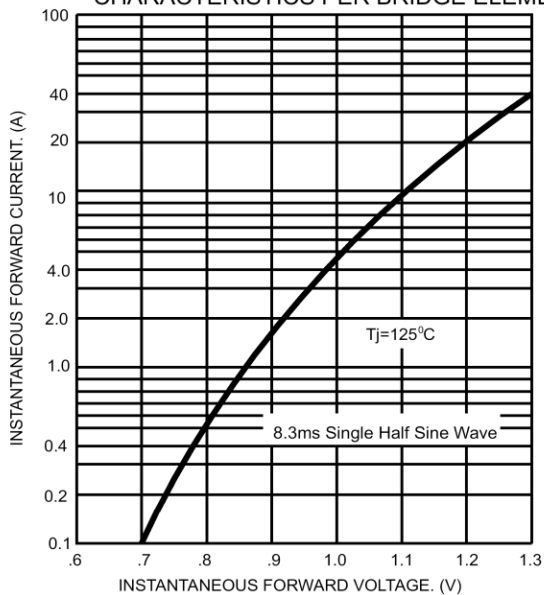
FIG.3- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

FIG.4- TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT