

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

**FEATURES**

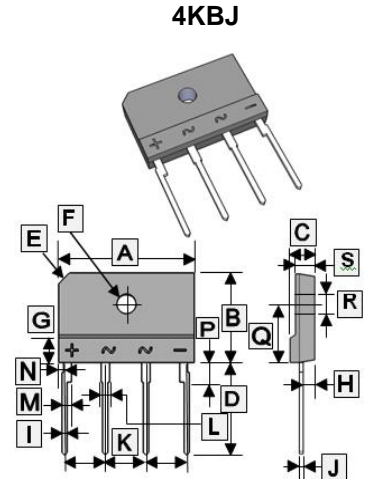
- Glass Passivated Chip
- High Surge Forward Current Capability

**APPLICATIONS**

- General Purpose 1 Phase Bridge Rectifier Applications

**ORDER INFORMATION**

Part Number	Type
KBJ15005~KBJ1510	Lead (Pb)-free
KBJ15005-C~KBJ1510-C	Lead (Pb)-free and Halogen-free



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	24.7	25.3	J	0.6	0.8
B	14.7	15.3	K	7.3	7.7
C	4.4	4.8	L	1.7	2.1
D	17.0	18.0	M	2.0 TYP.	
E	3.0 x 45°		N	1.05	1.45
F	3.1	3.4	P	3.3	3.8
G	4.0		Q	9.5	10.1
H	3.2	3.4	R	3.1	3.4
I	0.9	1.1	S	3.4	3.8

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** (T<sub>A</sub>=25°C unless otherwise specified)

Parameter	Symbol	Part Number								Unit
		KBJ 15005	KBJ 1501	KBJ 1502	KBJ 1504	KBJ 1506	KBJ 1508	KBJ 1510		
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V	
Average Rectified Output Current @60Hz Sine Wave, R-load	With Heatsink, T <sub>C</sub> =110°C	15							A	
	Without Heatsink, T <sub>A</sub> =25°C	3.6								
Surge (Non-repetitive) Forward Current @60Hz Sine Wave, 1 cycle, T <sub>J</sub> =25°C	I <sub>FSM</sub>	220							A	
Current Squared Time @1ms ≤ t < 8.3ms, T <sub>J</sub> =25°C, Rating of Per Diode	i <sup>2</sup> t	201							A <sup>2</sup> S	
Dielectric Strength @Terminals to Case, AC 1 minute	V <sub>DIS</sub>	2							KV	
Mounting Torque @Recommend Torque: 5kg · cm	Tor	8							Kg · cm	
Peak Forward Voltage @I <sub>FM</sub> =7.5A, Pulse Measurement, Rating of Per Diode	V <sub>F</sub>	1							V	
Peak Reverse Current @V <sub>RM</sub> =V <sub>RRM</sub> , Pulse Measurement, Rating of Per Diode	I <sub>RRM</sub>	5							μA	
Thermal Resistance	Without Heatsink	R <sub>θJA</sub> 25							°C/W	
	With Heatsink	R <sub>θJC</sub> 2.3								
Junction and Storage Temperature Range	T <sub>J</sub> , T <sub>STG</sub>	-55~150							°C	

**RATINGS AND CHARACTERISTIC CURVES**

FIG1:  $I_o$ - $T_c$  Curve

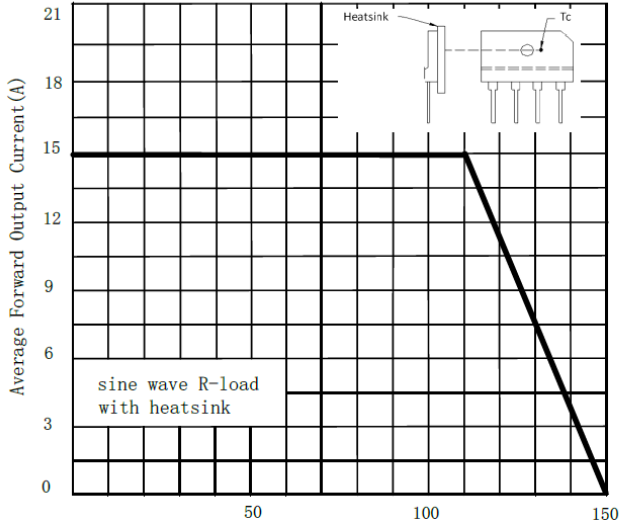


FIG2: Surge Forward Current Capability

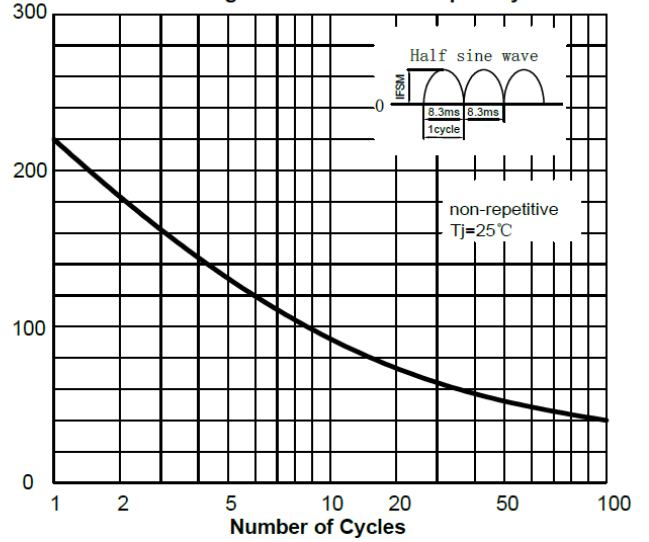


FIG3: Instantaneous Forward Voltage

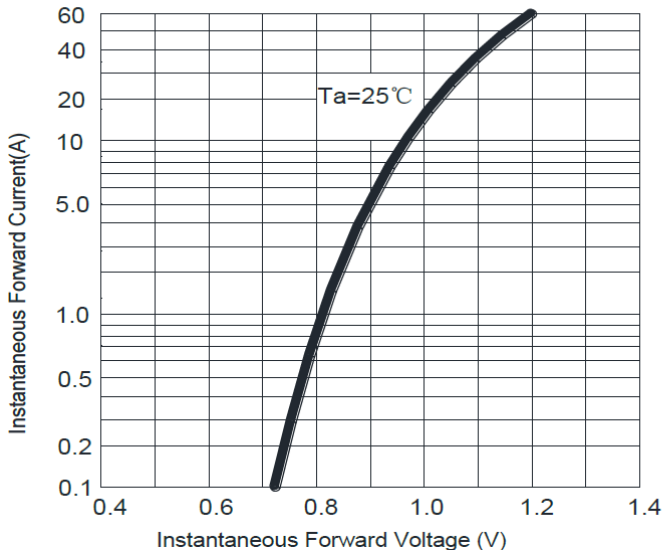


FIG4: Typical Reverse Characteristics

