

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

**FEATURES**

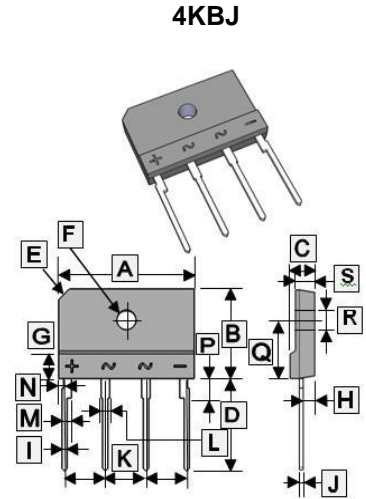
- Glass Passivated Chip
- High Surge Forward Current Capability

**APPLICATIONS**

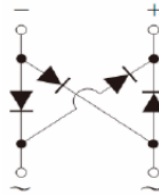
- General Purpose 1 Phase Bridge Rectifier Applications

**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	2.5	3.4	R	3.1	3.6
I	0.9	1.1	S	3.4	3.8



**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.  
For capacitive load, de-rate current by 20%.)

Parameter	Symbol	Part Number							Unit
		KBJ 15005	KBJ 1501	KBJ 1502	KBJ 1504	KBJ 1506	KBJ 1508	KBJ 1510	
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Average Rectified Output Current @60Hz Sine Wave, R-load	With Heatsink, $T_C=110^\circ C$	15							A
	Without Heatsink, $T_A=25^\circ C$	3.6							
Surge (Non-repetitive) Forward Current @60Hz Sine Wave, 1 cycle, $T_J=25^\circ C$	$I_{FSM}$	220							A
Current Squared Time @ $1ms \leq t < 8.3ms$ , $T_J=25^\circ C$ , Rating of Per Diode	$I^2t$	201							A <sup>2</sup> S
Dielectric Strength @Terminals to Case, AC 1 minute	$V_{DIS}$	2							KV
Mounting Torque @Recommend Torque: 5kg · cm	$T_{or}$	8							Kg · cm
Peak Forward Voltage @ $I_{FM}=7.5A$ , Pulse Measurement, Rating of Per Diode	$V_F$	1							V
Peak Reverse Current @ $V_{RM}=V_{RRM}$ , Pulse Measurement, Rating of Per Diode	$I_{RRM}$	5							$\mu A$
Thermal Resistance	Without Heatsink	$R_{\theta JA}$							$^\circ C/W$
	With Heatsink	$R_{\theta JC}$							
Junction and Storage Temperature Range	$T_J, T_{STG}$	-55~150							$^\circ C$

**RATINGS AND CHARACTERISTIC CURVES**

FIG1:  $I_o$ - $T_c$  Curve

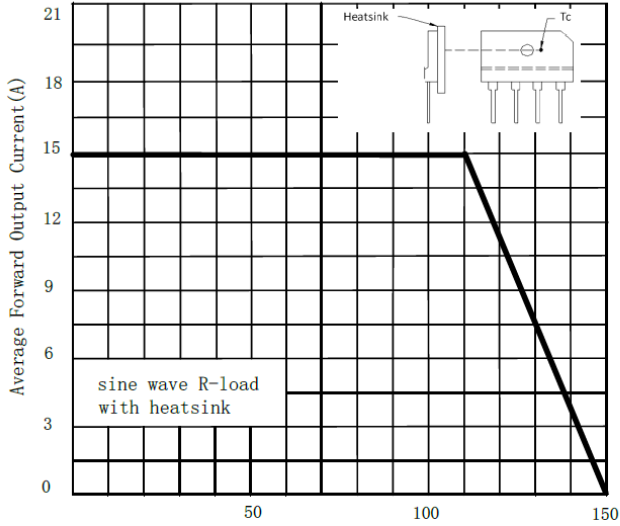


FIG2: Surge Forward Current Capability

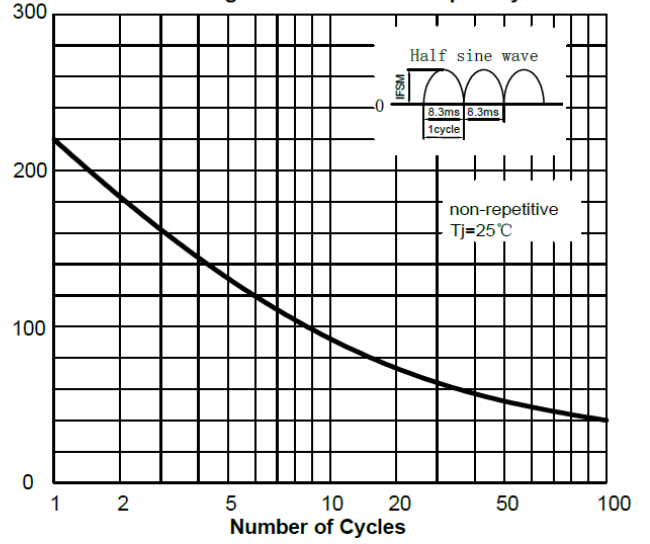


FIG3: Instantaneous Forward Voltage

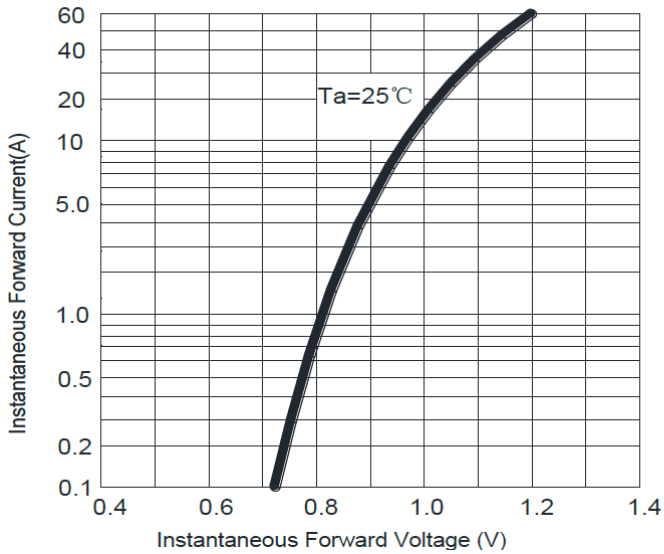


FIG4: Typical Reverse Characteristics

