Elektronische Bauelemente

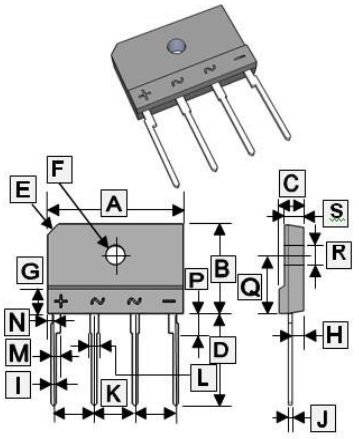
KBJ4005 ~ KBJ410

Voltage 50V ~ 1000V

4.0Amp Glass Passivated Bridge Rectifiers

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

4KBJ



FEATURES

- I_o : 4A
- V_{RRM} : 50~1000V
- Glass passivated chip
- High surge forward current capability

APPLICATIONS

- General purpose 1 phase Bridge rectifier applications

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

(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 4005	KBJ 401	KBJ 402	KBJ 404	KBJ 406	KBJ 408	KBJ 410	
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 =108℃	I_O	4							A
	Without heatsink T_A =25℃		2.3							
Surge (Nonrepetitive) Forward Current @ 60H_Z sine wave, 1 cycle, T_J=25℃		I_{FSM}	120							A
Current Squared Time [1]		I^2t	60							A^2S
Dielectric Strength@ Terminals to case，AC 1 minute		V_{DIS}	2							KV
Mounting Torque@ Recommend torque：5kg.cm		Tor	8							Kg.cm
Peak Forward Voltage@ I_{FM}=2A, Pulse measurement, Rating of per diode		V_{FM}	1.05							V
Peak Reverse Current@ V_{RM}=V_{RRM} , Pulse measurement, Rating of per diode		I_{RRM}	10							μA
Thermal Resistance	Without heatsink	$R_{\theta JA}$	30							℃ / W
	With heatsink	$R_{\theta JC}$	5.5							
Junction and Storage temperature range		T_J,T_{STG}	-55~+150							℃

Notes：

1. 1ms≤t<8.3ms T_J=25℃ ，Rating of per diode

RATINGS AND CHARACTERISTIC CURVES

FIG1:Io-Tc Curve

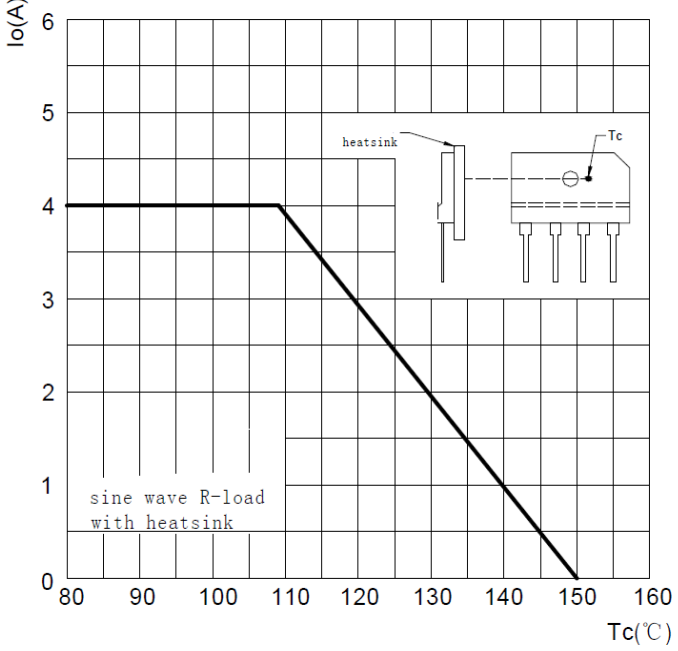


FIG2:Surge Forward Current Capadility

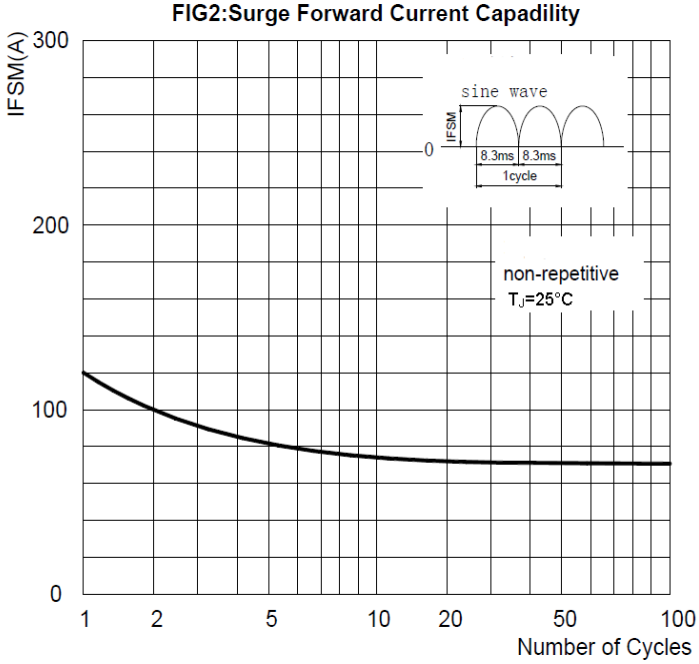


FIG3: Forward Voltage

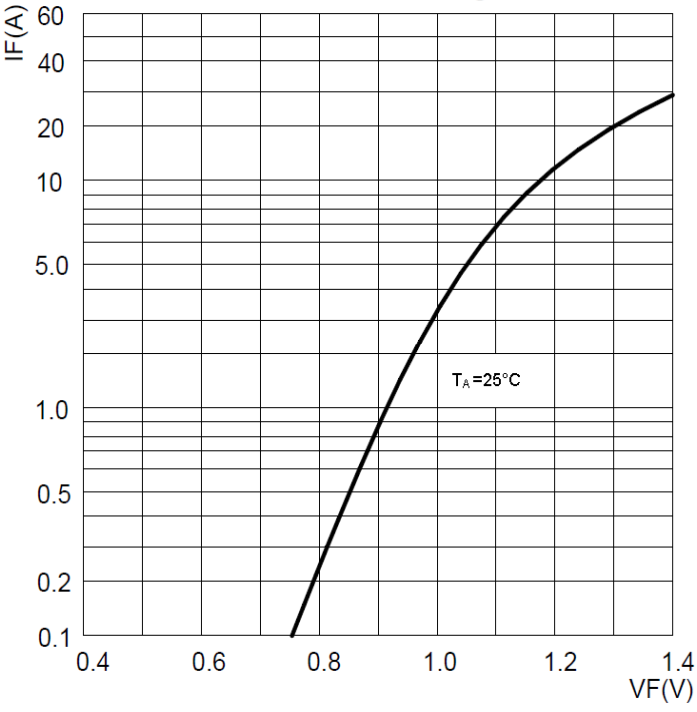


FIG4:Typical Reverse Characteristics

