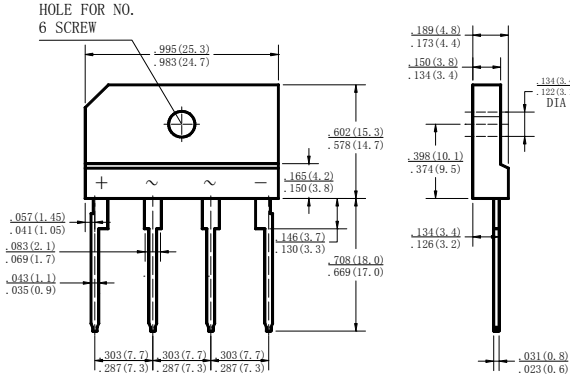


KBJ4005 THRU KBJ410

Bridge Rectifier

Voltage Range - 50 to 1000 Volts Current - 4.0 Ampere

4KBJ



Dimensions in inches and (millimeters)

FEATURES

- ◆ Glass passivated chip
- ◆ High surge forward current capability

MECHANICAL DATA

Case: Molded plastic body

Lead: Solder plated

Polarity: As marked

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	KBJ4						
				005	01	02	04	06	08	10
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Average Rectified Output Current	I_O	A	60Hz sine wave, R-load	With heatsink $T_c = 108^\circ\text{C}$						
				Without heatsink $T_a = 25^\circ\text{C}$						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	120						
Current Squared Time	I^2t	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j = 25^\circ\text{C}$, Rating of per diode	60						
Storage Temperature	T_{stg}	$^\circ\text{C}$		-55 ~ +150						
Junction Temperature	T_j	$^\circ\text{C}$		-55 ~ +150						
Dielectric Strength	V_{dis}	KV	Terminals to case, AC 1 minute	2						
Mounting Torque	Tor	$\text{kg} \cdot \text{cm}$	Recommend torque: $5\text{kg} \cdot \text{cm}$	8						

Electrical Characteristics ($T_a = 25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM} = 2\text{A}$, Pulse measurement, Rating of per diode	1.05
Peak Reverse Current	I_{RRM}	μA	$V_{RM} = V_{RRM}$, Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C/W}$	Between junction and ambient, Without heatsink	30
	$R_{\theta J-C}$		Between junction and case, With heatsink	5.5

RATINGS AND CHARACTERISTIC CURVES KBJ4005 THRU KBJ410

FIG1: I_o - T_c Curve

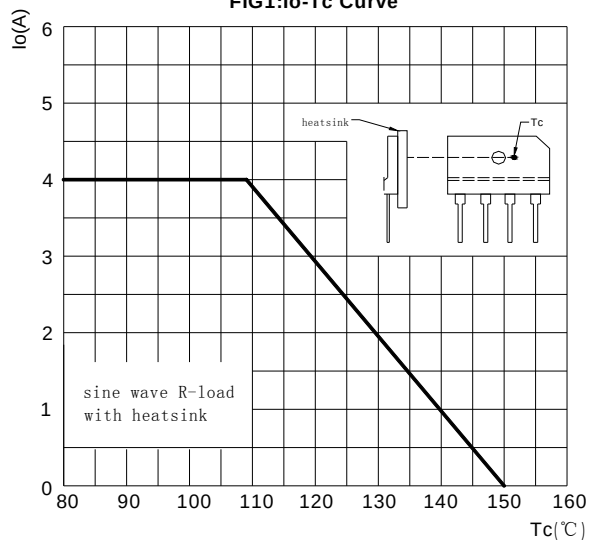


FIG2: Surge Forward Current Capability

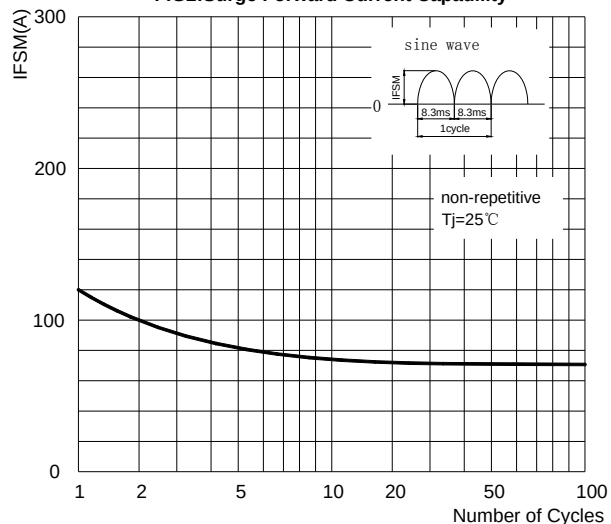


FIG3: Forward Voltage

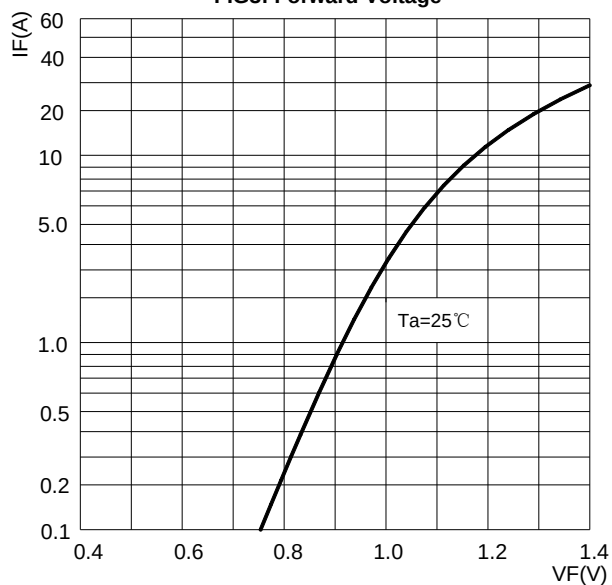


FIG4: Typical Reverse Characteristics

