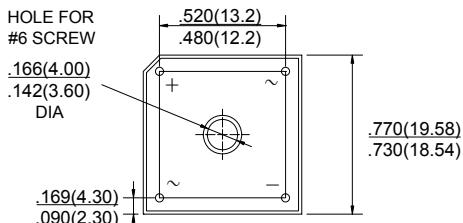


KBPC10005 THRU KBPC1010

Bridge Rectifier

Voltage Range - 50 to 1000 Volts Current - 10.0 Ampere

KBPC8



FEATURES

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

MECHANICAL DATA

Case: Molded plastic body

Lead: Solder plated

Polarity: As marked

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Limiting Values (Absolute Maximum Rating)

| Item | Symbol | Unit | Conditions | KBPC10 | | | | | | | |
|--------------------------------------|-----------|------------|---|--------|-----|-----|-----|-----|-----|------|-----------|
| | | | | 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, $T_a=40^\circ C$ | | | | | | | | 10.0 |
| Surge(Non-repetitive)Forward Current | I_{FSM} | A | 60Hz sine wave, 1 cycle, $T_a=25^\circ C$ | | | | | | | | 200 |
| Current Squared Time | I^2t | A^2s | $1ms \leq t < 8.3ms$, $T_j=25^\circ C$, Rating of per diode | | | | | | | | 166 |
| Storage Temperature | T_{stg} | $^\circ C$ | | | | | | | | | -55 ~+150 |
| Junction Temperature | T_j | $^\circ C$ | | | | | | | | | -55 ~+150 |

Electrical Characteristics ($T = 25^\circ C$ Unless otherwise specified)

| Item | Symbol | Unit | Test Condition | Max |
|----------------------|------------------|--------------|---|-----|
| Peak Forward Voltage | V_{FM} | V | $I_{FM}=5.0A$, Pulse measurement, Rating of per diode | 1.1 |
| Peak Reverse Current | I_{RRM} | μA | $V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode | 10 |
| Thermal Resistance | $R_{\theta J-A}$ | $^\circ C/W$ | Between junction and ambient | 5 |

RATINGS AND CHARACTERISTIC CURVES KBPC10005 THRU KBPC1010

