

CBR25-010P SERIES

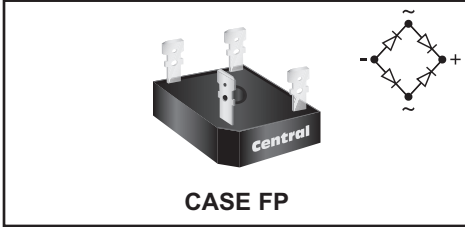
**SILICON BRIDGE RECTIFIERS
25 AMP, 100 THRU 1000 VOLT**



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DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBR25-010P series devices are silicon, single phase, full wave bridge rectifiers designed for general purpose applications. The molded epoxy case has a built-in metal baseplate for heat sink mounting. The device utilizes standard 0.25" FASTON terminals.



CASE FP

MARKING: FULL PART NUMBER

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| | | CBR25 | | | | | | |
|--|----------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------------|
| | SYMBOL | -010P | -020P | -040P | -060P | -080P | -100P | UNITS |
| Peak Repetitive Reverse Voltage | V_{RRM} | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| DC Blocking Voltage | V_R | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | $V_{R(RMS)}$ | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Forward Current ($T_C=60^\circ\text{C}$) | I_O | | | | 25 | | | A |
| Peak Forward Surge Current | I_{FSM} | | | | 350 | | | A |
| I^2t Rating for Fusing ($1\text{ms} < t < 8.3\text{ms}$) | I^2t | | | | 375 | | | A^2s |
| RMS Isolation Voltage (case to lead) | V_{iso} | | | | 2500 | | | Vac |
| Operating and Storage Junction Temperature | T_J, T_{stg} | | | | -65 to +150 | | | $^\circ\text{C}$ |
| Thermal Resistance | θ_{JC} | | | | 1.9 | | | $^\circ\text{C/W}$ |

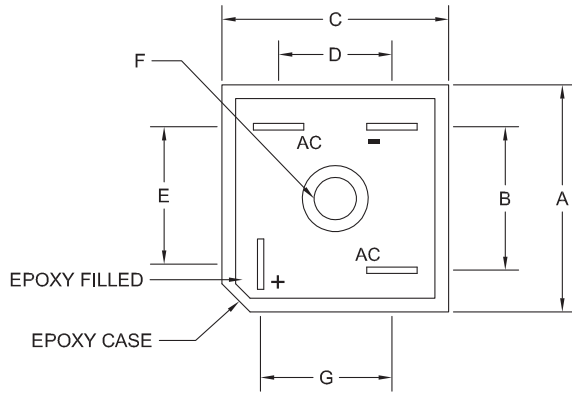
ELECTRICAL CHARACTERISTICS PER DIODE: ($T_A=25^\circ\text{C}$ unless otherwise noted)

| SYMBOL | TEST CONDITIONS | TYP | MAX | UNITS |
|---------------|--|------------|------------|---------------|
| I_R | $V_R = \text{Rated } V_{RRM}$ | | 10 | μA |
| I_R | $V_R = \text{Rated } V_{RRM}, T_A = 125^\circ\text{C}$ | | 500 | μA |
| V_F | $I_F = 12.5\text{A}$ | | 1.2 | V |
| C_J | $V_R = 4.0\text{V}, f = 1.0\text{MHz}$ | 300 | | pF |

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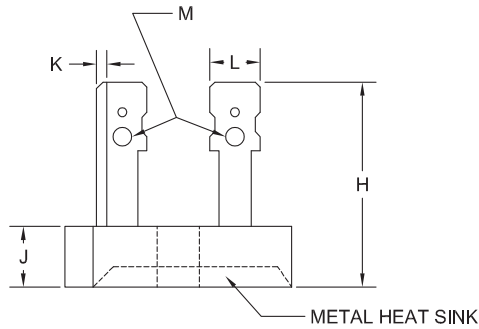
CASE FP - MECHANICAL OUTLINE



| DIMENSIONS | | | | |
|------------|--------|-------|-------------|-------|
| SYMBOL | INCHES | | MILLIMETERS | |
| | MIN | MAX | MIN | MAX |
| A | 1.115 | 1.135 | 28.32 | 28.83 |
| B | 0.688 | 0.732 | 17.50 | 18.59 |
| C | 1.115 | 1.135 | 28.32 | 28.83 |
| D | 0.542 | 0.582 | 13.77 | 14.78 |
| E | 0.618 | 0.672 | 15.70 | 17.07 |
| F (DIA.) | 0.200 | 0.220 | 5.08 | 5.59 |
| G | 0.632 | 0.672 | 16.05 | 17.07 |
| H | 0.740 | 0.849 | 18.80 | 21.58 |
| J | 0.290 | 0.334 | 7.37 | 8.50 |
| K | 0.027 | 0.035 | 0.71 | 0.91 |
| L | 0.250 | | 6.35 | |
| M (DIA.) | 0.940 | | 2.39 | |

CASE FP (REV:R2)

MARKING: FULL PART NUMBER



R2

R3 (24-June 2013)