

# Central's CEN-U

## Power

## Transistors

Ideal second source for Motorola's MPS-U series power transistors  
Exact electrical equivalent in JEDEC TO-202 case.

- Superior power dissipation  
 $P_D$  ( $T_A = 25^\circ\text{C}$ ) 1.75 Watts vs. 1.0 Watt Motorola
- Rugged package
- Pin for pin replacement
- Good availability
- Up to 25% lower unit cost



### CROSS REFERENCE

| MOTOROLA PART NUMBER | CENTRAL PART NUMBER | MOTOROLA PART NUMBER | CENTRAL PART NUMBER |
|----------------------|---------------------|----------------------|---------------------|
| MPS-U01              | CEN-U01             | MPS-U51              | CEN-U51             |
| MPS-U01A             | CEN-U01A            | MPS-U51A             | CEN-U51A            |
| MPS-U02              | CEN-U02             | MPS-U52              | CEN-U52             |
| MPS-U05              | CEN-U05             | MPS-U55              | CEN-U55             |
| MPS-U06              | CEN-U06             | MPS-U56              | CEN-U56             |
| MPS-U07              | CEN-U07             | MPS-U57              | CEN-U57             |
| MPS-U10              | CEN-U10             | MPS-U95              | CEN-U95             |
| MPS-U45              | CEN-U45             |                      |                     |

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

| TYPE NUMBER |          | $I_C$ | $V_{CEO}$ | $P_D$ (MAX)<br>$T_A = 25^\circ\text{C}$ | $P_D$ (MAX)<br>$T_C = 25^\circ\text{C}$ | $h_{FE}$ @ $I_C$ |      | $V_{CE}$ (SAT)<br>MAX @ $I_C$ |      | $f_T$<br>MIN | CASE            |
|-------------|----------|-------|-----------|-----------------------------------------|-----------------------------------------|------------------|------|-------------------------------|------|--------------|-----------------|
| NPN         | PNP      | AMPS  | VOLTS     | WATTS                                   | WATTS                                   | MIN/MAX          | AMPS | VOLTS                         | AMPS | MHz          |                 |
| CEN-U10     |          | 0.1   | 300       | 1.75                                    | 10                                      | 40               | 0.03 | 1.5                           | 0.02 | 60           | <br>TO-202(EBC) |
| CEN-U01     | CEN-U51  | 2.0   | 30        | 1.75                                    | 10                                      | 60               | 0.1  | 0.5                           | 1.0  | 50           |                 |
| CEN-U01A    | CEN-U51A | 2.0   | 40        | 1.75                                    | 10                                      | 60               | 0.1  | 0.5                           | 1.0  | 50           |                 |
| CEN-U02     | CEN-U52  | 2.0   | 40        | 1.75                                    | 10                                      | 50/300           | 0.15 | 0.4                           | 0.15 | 50           |                 |
| CEN-U45     | CEN-U95  | 2.0   | 40        | 1.75                                    | 10                                      | 25K/150K         | 0.2  | 1.0                           | 0.2  | 100          |                 |
| CEN-U05     | CEN-U55  | 2.0   | 60        | 1.75                                    | 10                                      | 80               | 0.05 | 0.5                           | 0.25 | 50           |                 |
| CEN-U06     | CEN-U56  | 2.0   | 80        | 1.75                                    | 10                                      | 80               | 0.05 | 0.5                           | 0.25 | 50           |                 |
| CEN-U07     | CEN-U57  | 2.0   | 100       | 1.75                                    | 10                                      | 80               | 0.05 | 0.5                           | 0.25 | 50           |                 |

For complete Specification Sheets, consult factory.

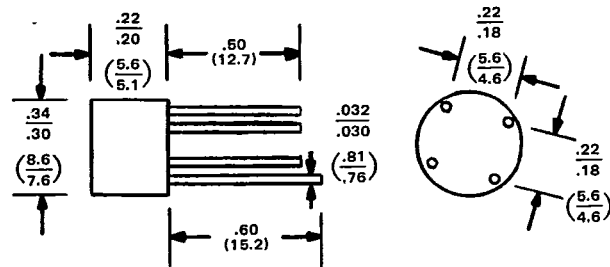
# Central<sup>TM</sup> Semiconductor Corp.

145 ADAMS AVENUE • SMITHTOWN, NY 11788  
TEL: (516) 435-1110 • TWX (510) 224-6493

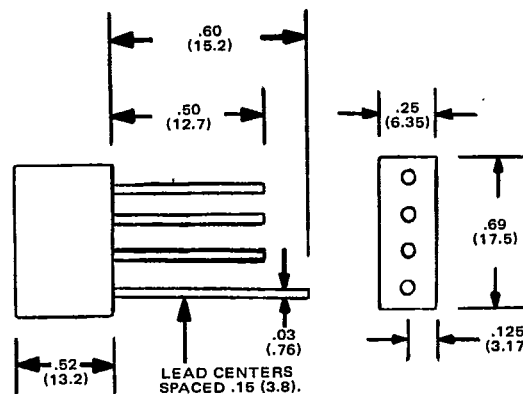
MANUFACTURERS OF DISCRETE SEMICONDUCTORS

## CASE OUTLINE DRAWINGS

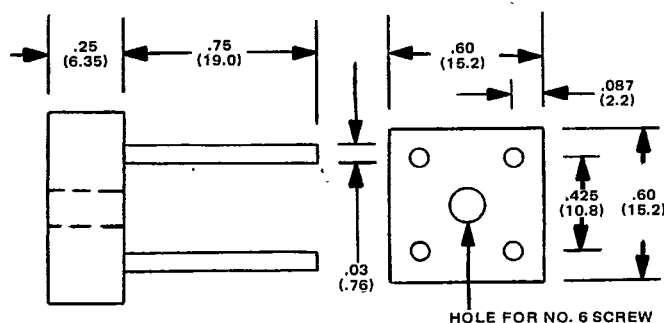
D



CASE A

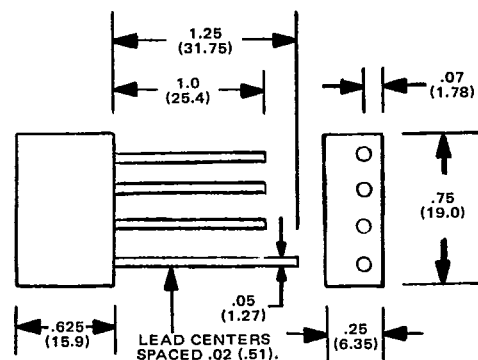
CBR1 Series  
CBR2 Series

CASE B

CBR1-L Series  
CBR2-L Series

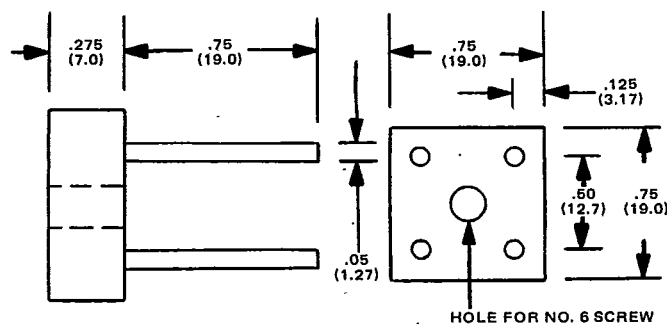
CASE C

CBR3-P Series



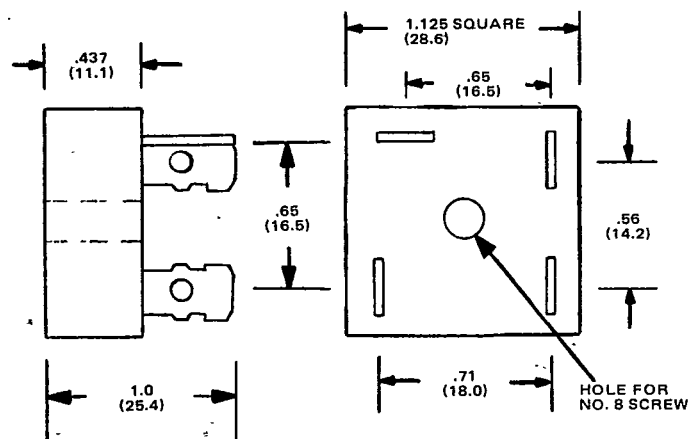
CASE D

CBR4-L Series



CASE E

CBR8 Series



CASE F

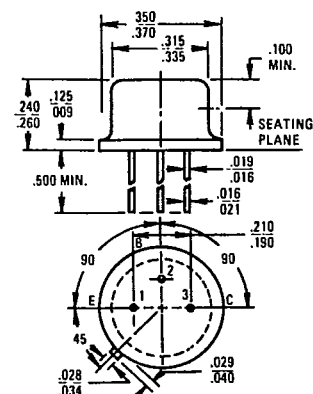
CBR10 Series, CBR25 Series  
CBR12 Series, CBR30 Series

All Dimensions in Inches (Millimeters)

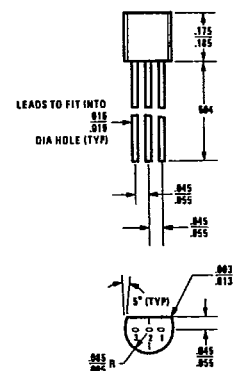
Drawings Not To Scale

## カ

TO-39



TO-92

**TO-106**