

# RECTIFIERS

High Efficiency, 3.5A

UES1301 BYV28-50  
UES1302 BYV28-100  
UES1303 BYV28-150

FEATURES

- Very Fast Recovery Times
- Very Low Forward Voltage
- Small Size
- Convenient Package

DESCRIPTION

An axial leaded power rectifier useful in many switching applications. Particularly suited where very fast recovery and low forward voltage are required.

ABSOLUTE MAXIMUM RATINGS

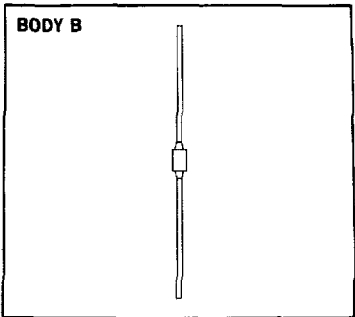
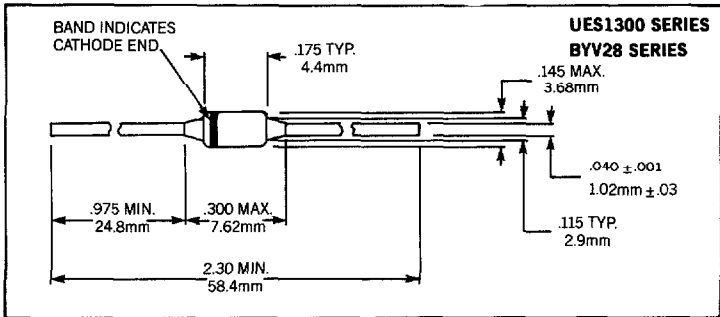
|                                                                                     | UES1301         | UES1302 | UES1303 | BYV28-50 | BYV28-100 | BYV28-150 |
|-------------------------------------------------------------------------------------|-----------------|---------|---------|----------|-----------|-----------|
| Peak Inverse Voltage, $V_R$                                                         | 50V             | 100V    | 150V    | 50V      | 100V      | 150V      |
| Maximum Average D.C. Output at $T_L = 75^\circ\text{C}$ , $L = \frac{3}{16}"$ $I_O$ | 6.0A            |         |         | 3.5A     |           |           |
| Non-Repetitive Surge Current at 8.3ms, $I_{FSM}$                                    | 125A            |         |         | 80A      |           |           |
| Thermal Resistance at $L = \frac{3}{16}"$ , $R_{\theta JO}$                         | 20°C/W          |         |         | 25°C/W   |           |           |
| Junction Operating Temperature, $T_J$                                               | 175°C           |         |         | 165°C    |           |           |
| Operating and Storage Temperature Range                                             | -55°C to +175°C |         |         |          |           |           |

ELECTRICAL SPECIFICATIONS

| Type                               | Maximum Reverse Voltage $V_R$ | Maximum Forward Voltage @ |                           | Maximum Reverse Current @ Rated $V_R$ |                           | Maximum Reverse Recovery Time* |
|------------------------------------|-------------------------------|---------------------------|---------------------------|---------------------------------------|---------------------------|--------------------------------|
|                                    |                               | $T_J = 25^\circ\text{C}$  | $T_J = 100^\circ\text{C}$ | $T_J = 25^\circ\text{C}$              | $T_J = 100^\circ\text{C}$ |                                |
| UES1301<br>UES1302<br>UES1303      | 50V<br>100V<br>150V           | .925V @ 6A                | .850V @ 6A                | 5 $\mu$ A                             | 150 $\mu$ A               | 30ns                           |
| BYV28-50<br>BYV28-100<br>BYV28-150 | 50V<br>100V<br>150V           | 1.10V @ 5A                | .75V @ 3A<br>.90V @ 5A    | 1 $\mu$ A                             | 150 $\mu$ A               | 30ns                           |

\*Measured in circuit  $I_F = 0.5A$ ,  $I_R = 1.0A$ ,  $I_{REC} = .25A$

MECHANICAL SPECIFICATIONS



THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 10

**Microsemi Corp.**  
**Watertown**  
The diode experts

