

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

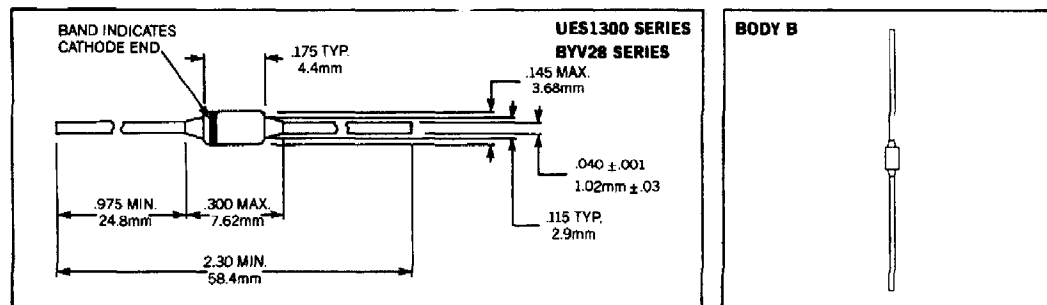
| | UES1301 | UES1302 | UES1303 | BYV28-50 | BYV28-100 | BYV28-150 |
|--|---------|---------|---------|-----------------|-----------|-----------|
| Peak Inverse Voltage, V_R | 50V | 100V | 150V | 50V | 100V | 150V |
| Maximum Average D.C. Output at $T_J = 75^\circ\text{C}$, $L = \frac{3}{8}"$ I_o | | 6.0A | | | 3.5A | |
| Non-Repetitive Surge Current at 8.3ms, I_{FSM} | | 125A | | | 80A | |
| Thermal Resistance at $L = \frac{3}{8}"$, $R_{\theta JC}$ | | 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 UES1302 UES1303 | 50V 100V 150V | .925V @ 6A | .850V @ 6A | | 5 μA | 150 μA | 30ns |
| BYV28-50 BYV28-100 BYV28-150 | 50V 100V 150V | 1.10V @ 5A | .75V @ 3A | .90V @ 5A | 1 μA | 150 μA | 30ns |

*Measured in circuit $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $t_{rec} = .25\text{A}$

MECHANICAL SPECIFICATIONS



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Quality Semi-Conductors