

RECTIFIERS
High Efficiency, 1A

UES1001-UES1003

2

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

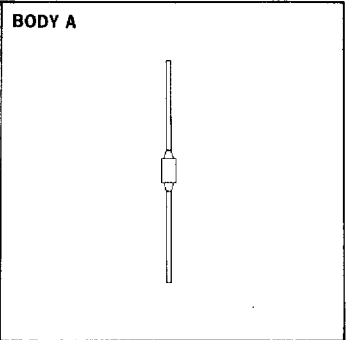
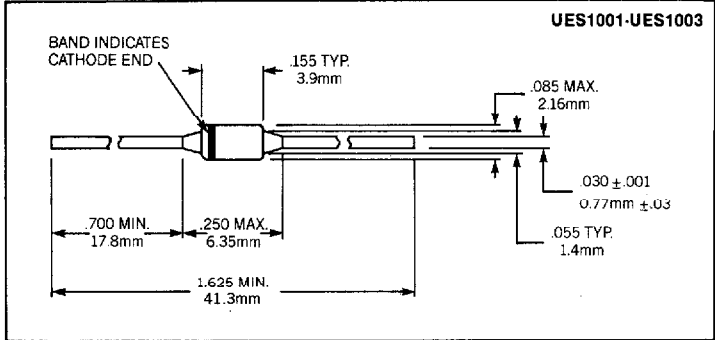
Table with 2 columns: Parameter and Rating. Rows include Peak Inverse Voltage (50V, 100V, 150V), Maximum Average D.C. Output Current (1A), Non-Repetitive Surge Current (30A), Thermal Resistance (75°C/W), and Operating and Storage Temperature Range (-55°C to +175°C).

ELECTRICAL SPECIFICATIONS

Table with 7 columns: Type, PIV, Maximum Forward Voltage (V_F) at T_J = 25°C and T_J = 100°C, Maximum Reverse Current (I_R) at T_J = 25°C and T_J = 100°C, and Maximum Reverse Recovery Time*. Rows for UES1001, UES1002, and UES1003.

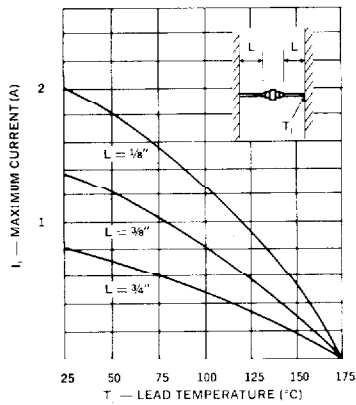
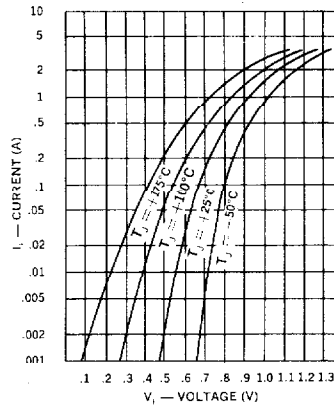
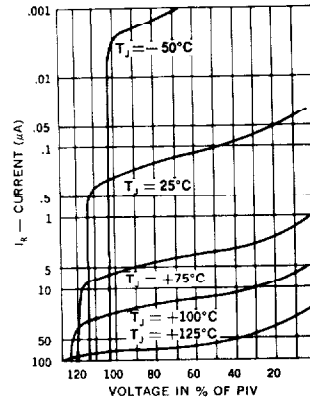
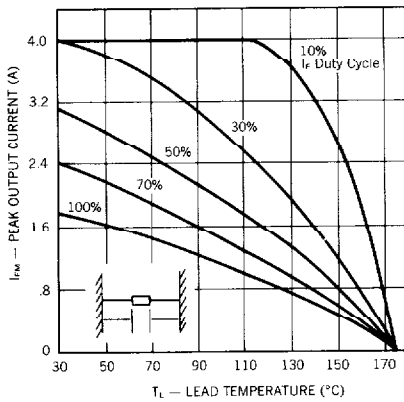
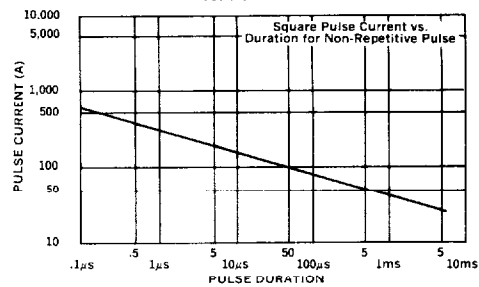
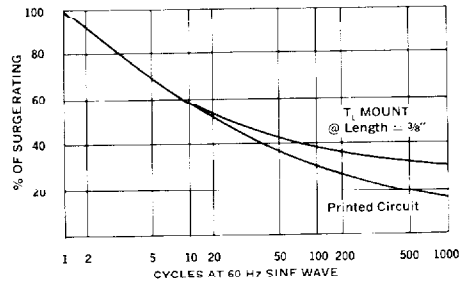
*Measured in circuit I_F = .5A, I_R = 1.0A, I_REC = .25A

MECHANICAL SPECIFICATIONS

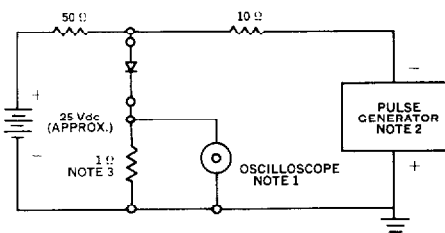


THESE DEVICES ALSO AVAILABLE IN SURFACE MOUNT PACKAGE. SEE SECTION 10

Microsemi Corp.
Watertown
The diode experts

Output Current
vs. Lead TemperatureTypical Forward Current
vs. Forward VoltageTypical Reverse Current
vs. VoltagePeak Output Current vs.
Lead TemperatureForward Pulse Current
vs. DurationMultiple Surge Current
vs. Duration

Reverse-Recovery Circuit



NOTES:

1. Oscilloscope: Rise time $\leq 3\text{ns}$; input impedance = 50 Ω .
2. Pulse Generator: Rise time $\leq 3\text{ns}$; source impedance 10 Ω .
3. Current viewing resistor, non-inductive, coaxial recommended.

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