

UPS835L

PRELIMINARY

**SURFACE MOUNT
POWERMITE® 3 Surface Mount Power Package**

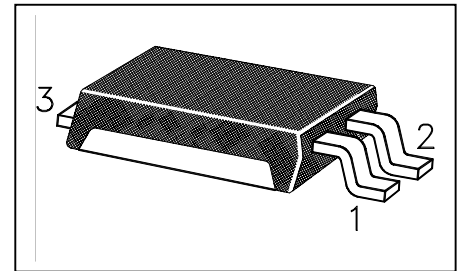
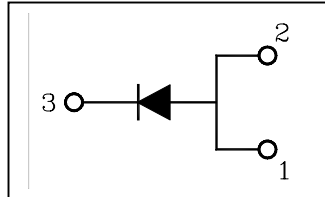
**SCHOTTKY BARRIER
RECTIFIER
8 AMP 35 VOLT**

Features

- Low Profile – Maximum height of 1.1 mm
- Footprint Area of 16.51 mm
- Low V_F Provides Higher Efficiency
- Supplied in 16mm Tape and Reel – 6000 units/reel
- Low Thermal Resistance with Direct Thermal Path of Die on Exposed Cathode Heat Sink

Mechanical Characteristics

- Case: Molded Epoxy
- Meets UL94VO at 1/8 inch
- Weight: 72 milligrams (approximate)
- Device Marking UPS835L
- Lead and Mounting Surface Temperature for Soldering = 260°C Maximum for 10 Seconds



Maximum Ratings

| RATING | (Conditions) | SYMBOL | VALUE | UNIT |
|-----------------------------------|---|----------------|-------------|------|
| Peak Repetitive Reverse Voltage | | V_{RRM} | 35 | V |
| Working Peak Reverse Voltage | | V_{RWM} | 35 | V |
| DC Blocking Voltage | | V_R | 35 | V |
| Average Rectified Forward Current | (@ Rated V_R and $T_C = 100^\circ\text{C}$) | I_O | 8 | A |
| Repetitive Peak Surge Current | (Non-Repetitive peak surge current @ $I_b = 8$ Amps) | I_{FSM} | 100 | A |
| Storage Temperature Range | | T_{stg}, T_C | - 55 to 150 | °C |
| Operating Temperature Range | | T_J | - 55 to 125 | °C |
| Voltage Rate of Change | (@ Rated V_R and $T_J = 25^\circ\text{C}$) | dv/dt | 1000 | V/us |

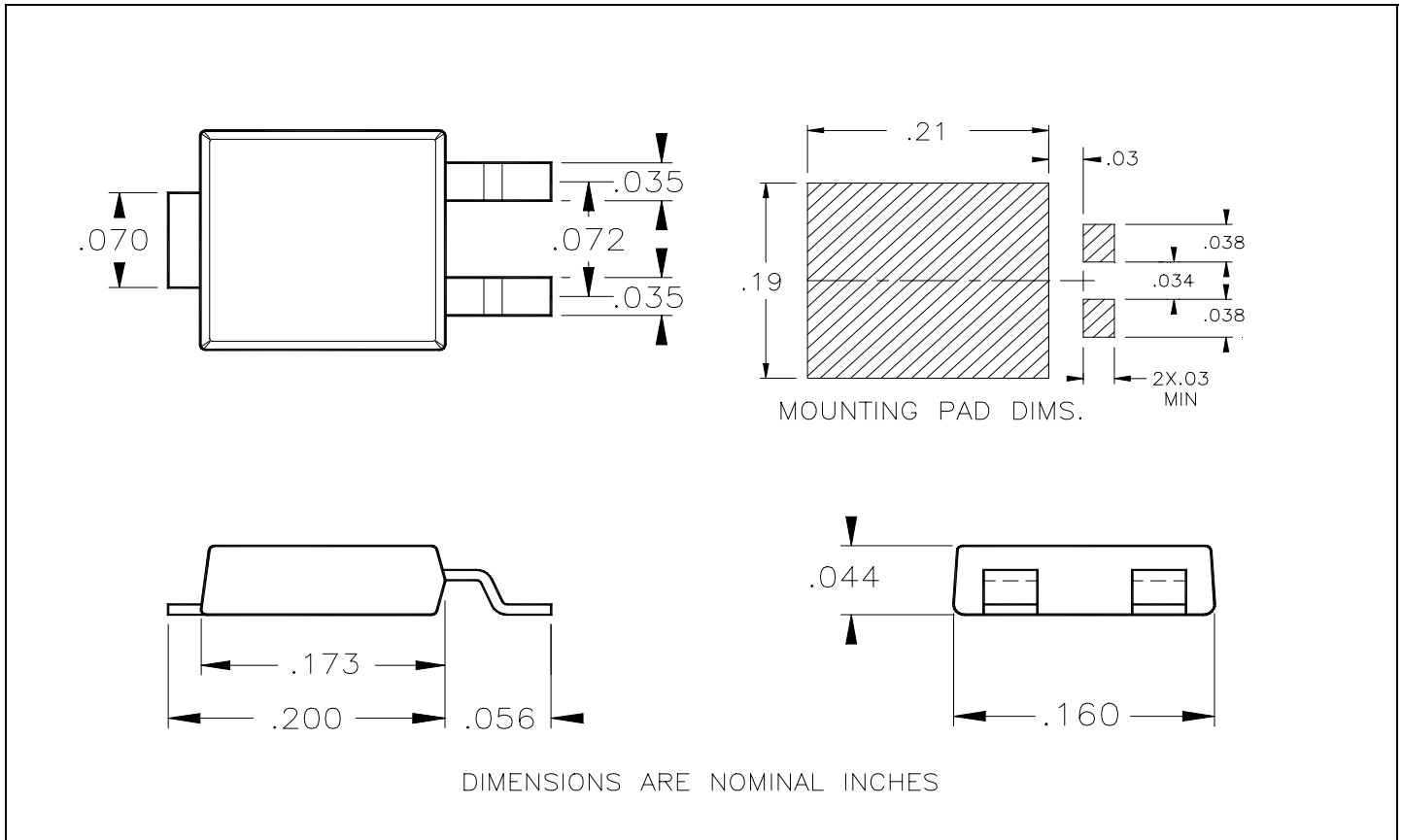
Thermal Characteristics

| | | | |
|---|-------------|----|------|
| Thermal Resistance, Junction – to -- Case | R_{tjtab} | 3 | °C/W |
| Thermal Resistance, Junction-to-Ambient | R_{tja} | 60 | °C/W |

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Electrical Characteristics

| RATING | (Conditions) | SYMBOL | VALUE | UNITS |
|---------------------------------------|--|--------|-------|-------|
| Maximum Instantaneous Forward Voltage | ($I_F = 8$ Amps, $T_C = + 25^\circ\text{C}$) | V_F | 0.51 | Volts |
| | ($I_F = 8$ Amps, $T_C = +125^\circ\text{C}$) | V_F | 0.41 | |
| Maximum Instantaneous Reverse Current | (Rated Vdc, $T_C = + 25^\circ\text{C}$) | I_R | 1.40 | mA |
| | (Rated Vdc, $T_C = + 125^\circ\text{C}$) | I_R | 35.0 | |



MECHANICAL SPECIFICATIONS