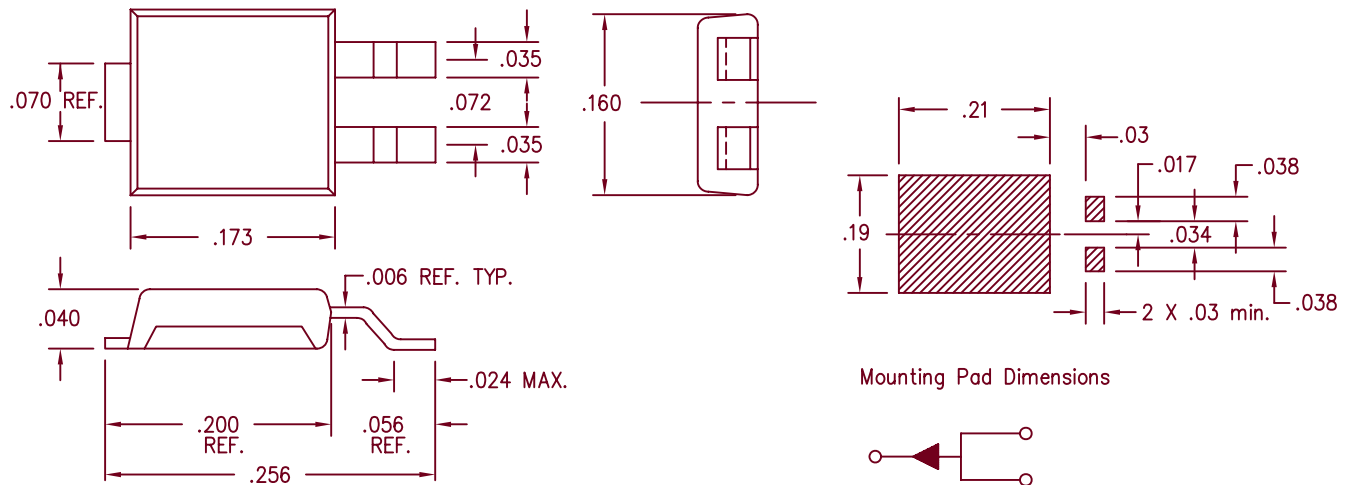


# 6 Amp Schottky OR'ing Rectifier UPS615



Mounting Pad Dimensions

Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UPS615	----	15V	15V

- Powermite 3 package
- Schottky barrier rectifier
- $V_f @ 6A, 100^\circ C = 0.22V$
- Guard ring for reverse protection
- $125^\circ C$  Junction temperature
- Full Cathode contact to optimize ratings

## Electrical Characteristics

Average forward current	$I_{F(AV)}$ 6A	$T_L = 105^\circ C$
Maximum surge current	$I_{FSM}$ 300 Amps	8.3ms, half sine
Maximum repetitive reverse current	$I_{R(OV)}$ 2 Amps	$f = 1$ KHz, $25^\circ C$ , 1 $\mu$ sec square wave
Max peak forward voltage	$V_{FM}$ 0.32 Volts	$I_{FM} = 6A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM}$ 0.22 Volts	$I_{FM} = 6A; T_J = 100^\circ C^*$
Max peak reverse current	$I_{RM}$ 4 mA	$V_{RRM}, T_J = 25^\circ C^*$
Typical peak reverse current	$I_{RM}$ 135 mA	$V_{RRM}, T_J = 100^\circ C^*$
Typical peak reverse current	$I_{RM}$ 75 mA	$V_R = 5V, T_J = 100^\circ C^*$
Typical junction capacitance	$C_J$ 1250 pF	$V_R = 5.0V, T_J = 25^\circ C$

\*Pulse test: Pulse width 300  $\mu$ sec, Duty cycle 2%

## Thermal and Mechanical Characteristics

Storage temp range	$T_{STG}$	$-55^\circ C$ to $150^\circ C$
Operating junction temp range	$T_J$	$-55^\circ C$ to $125^\circ C$
Max thermal resistance - Junction to Case	$R_{\theta Jtab}$	$4^\circ C/W$



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# UPS615

Figure 1  
Typical Forward Characteristics

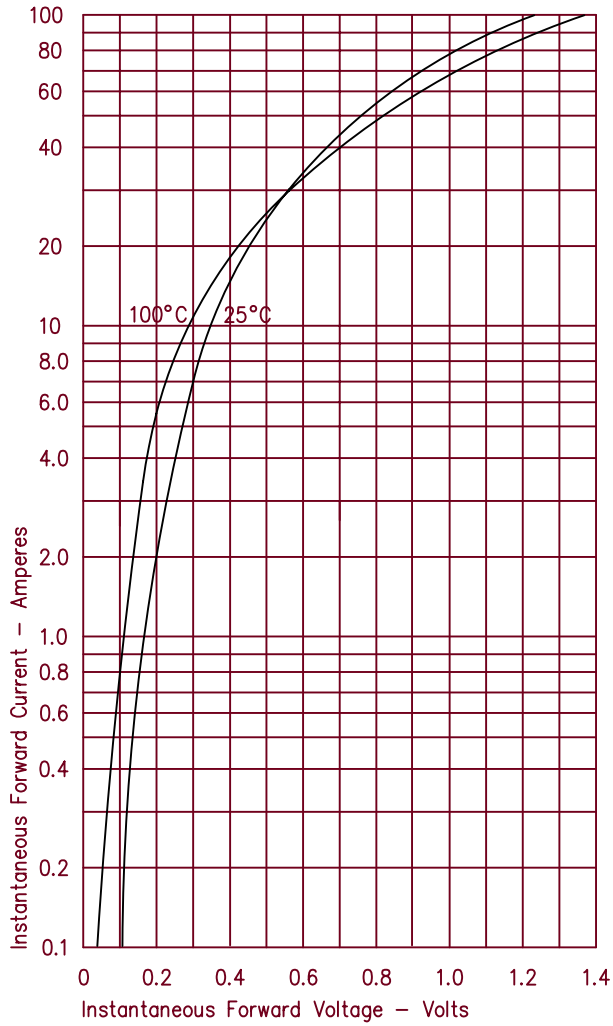


Figure 3  
Typical Junction Capacitance

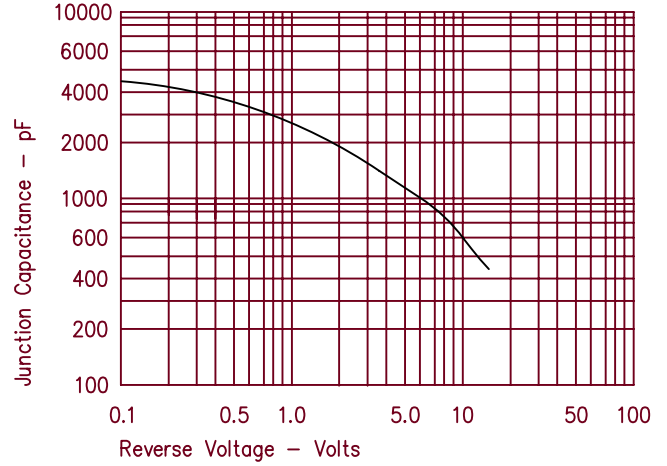


Figure 2  
Typical Reverse Characteristics

