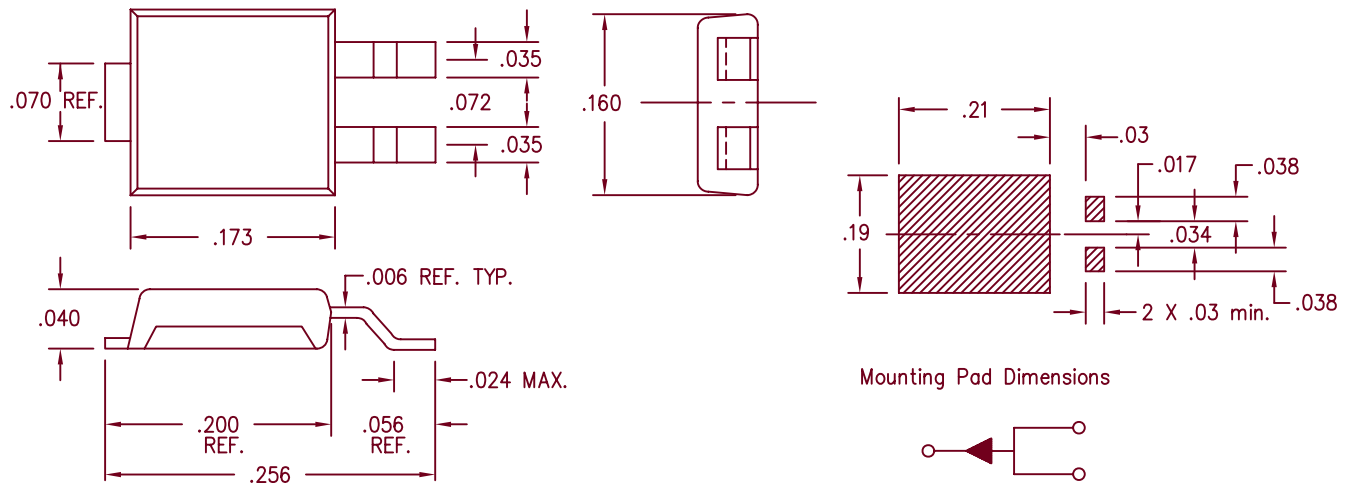


3 Amp Schottky OR'ing Rectifier UPS315



Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UPS315	----	15V	15V

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

Electrical Characteristics

Average forward current	$I_F(AV) 3A$	$T_L = 104^\circ C$
Maximum surge current	$I_{FSM} 150 \text{ Amps}$	8.3ms, half sine
Maximum repetitive reverse current	$I_{R(OV)} 2 \text{ Amps}$	$f = 1 \text{ KHz}, 25^\circ C, 1 \mu\text{sec square wave}$
Max peak forward voltage	$V_{FM} 0.32 \text{ Volts}$	$I_{FM} = 3A; T_J = 25^\circ C^*$
Max peak forward voltage	$V_{FM} 0.22 \text{ Volts}$	$I_{FM} = 3A; T_J = 100^\circ C^*$
Max peak reverse current	$I_{RM} 2 \text{ mA}$	$V_{RRM}, T_J = 25^\circ C^*$
Typical peak reverse current	$I_{RM} 70 \text{ mA}$	$V_{RRM}, T_J = 100^\circ C^*$
Typical peak reverse current	$I_{RM} 40 \text{ mA}$	$V_R = 5V, T_J = 100^\circ C^*$
Typical junction capacitance	$C_J 600 \text{ pF}$	$V_R = 5.0V, T_J = 25^\circ C$

*Pulse test: Pulse width 300 μsec , 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	$R_{\theta Jtab}$	$9^\circ C/W$



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05-30-07 Rev. 2

UPS315

Figure 1
Typical Forward Characteristics

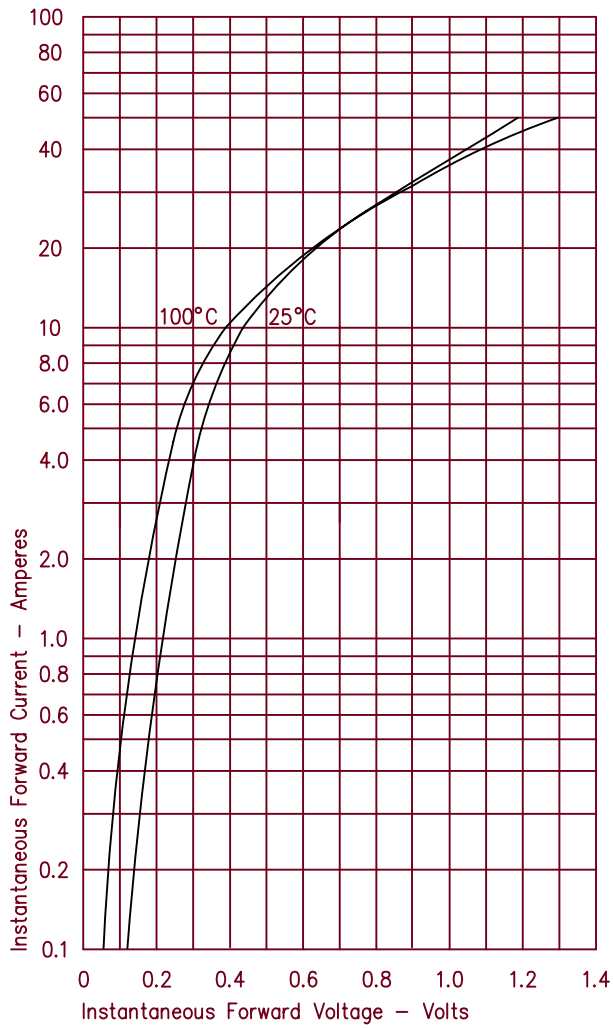


Figure 3
Typical Junction Capacitance

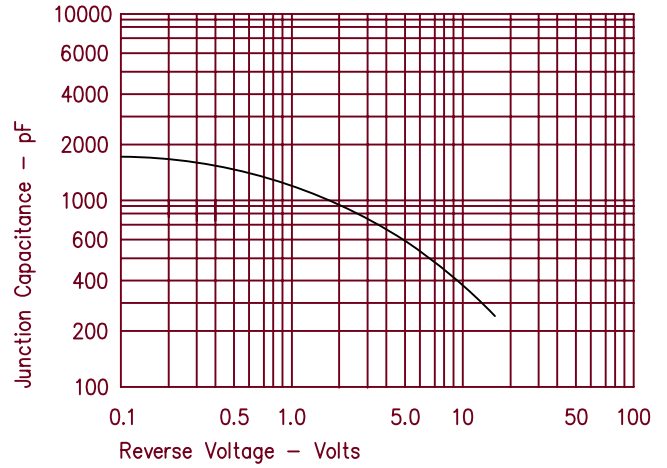


Figure 2
Typical Reverse Characteristics

