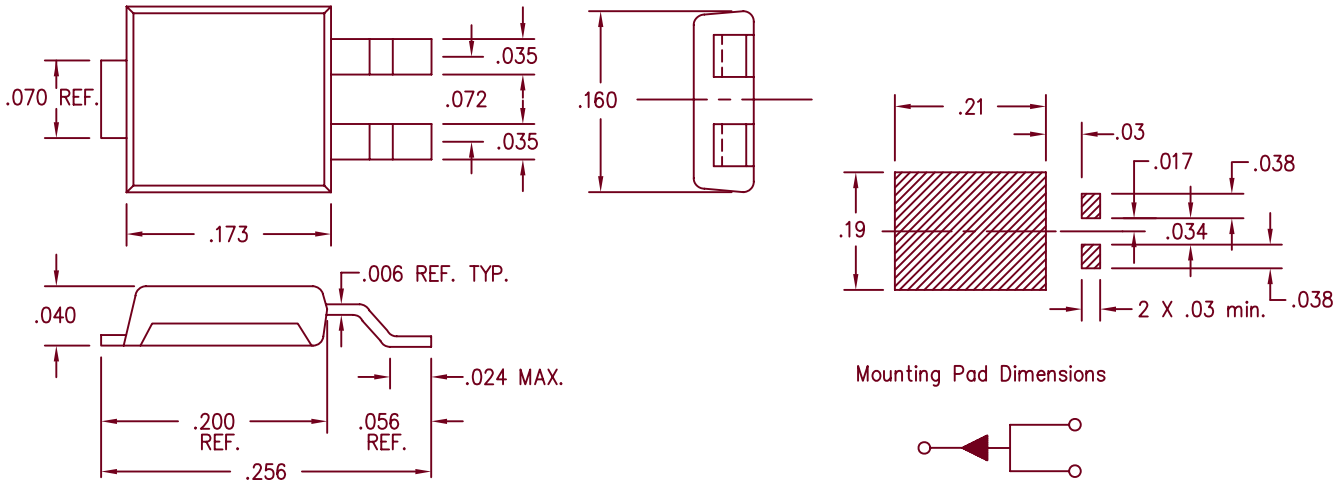
3 Amp Schottky OR'ing Rectifier

UPS315



Mounting Pad Dimensions

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°C = 0.22V
- Guard ring for reverse protection
- 125°C Junction temperature
- Full Cathode contact to optimize ratings

Electrical Characteristics

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

*Pulse test: Pulse width 300 μsec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T_{STG}	−55°C to 150°C
Operating junction temp range	T_J	−55°C to 125°C
Max thermal resistance – Junction to Case	$R_{\theta Jtab}$	9°C/W

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UPS315

Figure 1
Typical Forward Characteristics

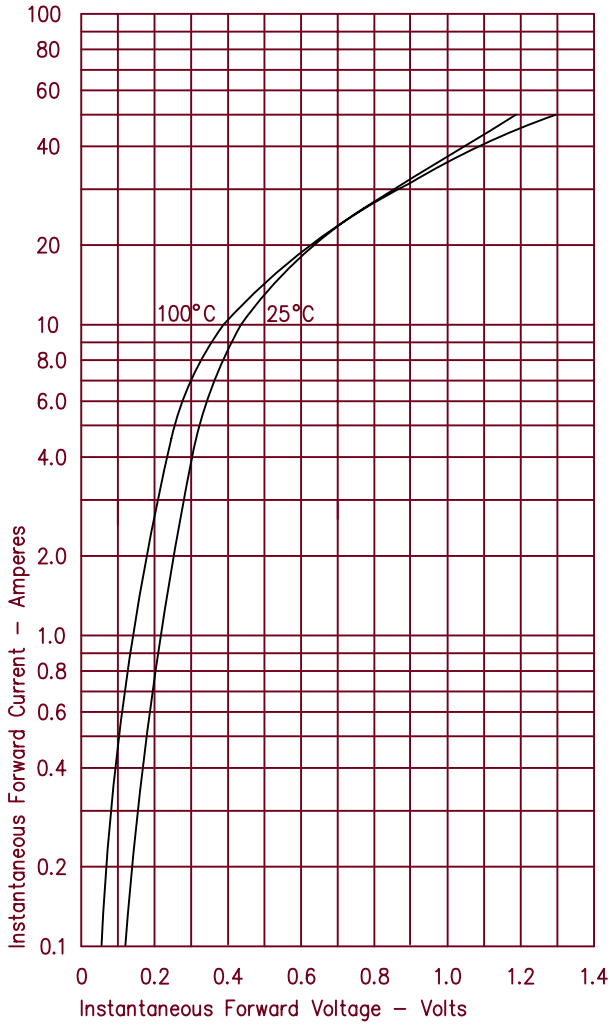


Figure 3
Typical Junction Capacitance

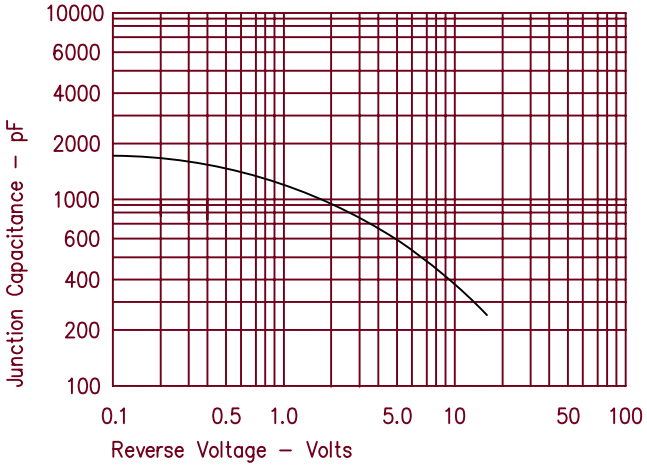
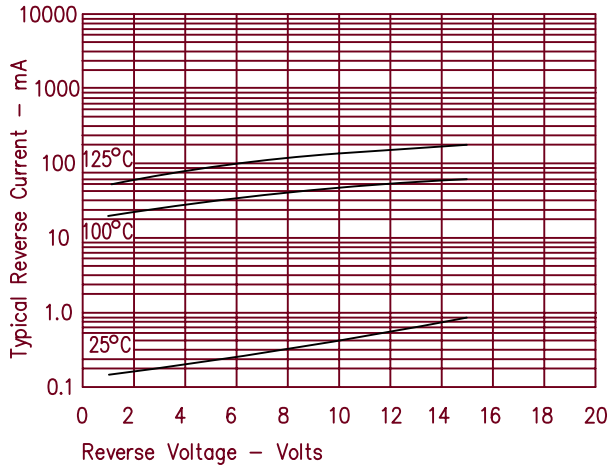


Figure 2
Typical Reverse Characteristics



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