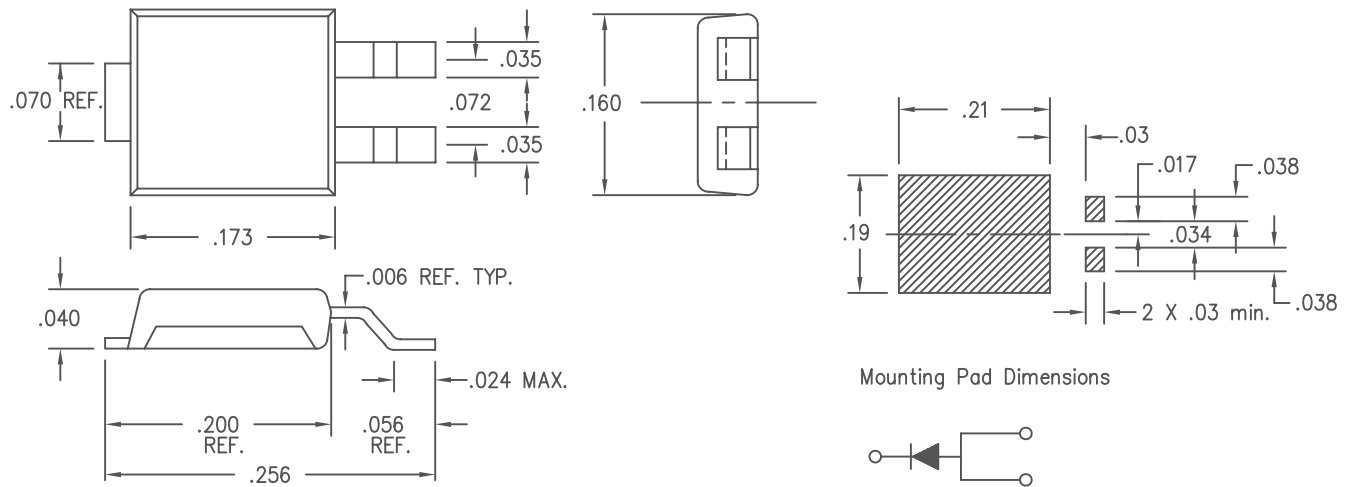


6 Amp Schottky Rectifier UPS6150



Microsemi Catalog Number	Industry Part Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
UPS6150	----	150V	150V

- Powermite 3 package
- Schottky barrier rectifier
- $V_f @ 6A, 125^\circ C = 0.65V$
- Guard ring for reverse protection
- 15A Junction temperature
- Full Cathode contact to optimize ratings

Electrical Characteristics

Average forward current	$I_F(AV)$ 6A	$T_L = 132^\circ C$
Maximum surge current	I_{FSM} 225 Amps	8.3ms, half sine
Maximum surge current	I_{FSM} 215 Amps	10ms, half sine
Maximum repetitive reverse current	I_R 2 Amps	$f = 1 \text{ KHz}, 25^\circ C, 1 \mu\text{sec square wave}$
Max peak forward voltage	V_{FM} 0.75 Volts	$I_{FM} = 6A; T_J = 25^\circ C^*$
Max peak forward voltage	V_{FM} 0.65 Volts	$I_{FM} = 6A; T_J = 125^\circ C^*$
Max peak reverse current	I_{RM} 100 μA	$V_{RRM}, T_J = 25^\circ C^*$
Typical peak reverse current	I_{RM} 200 μA	$V_{RRM}, T_J = 125^\circ C^*$
Typical junction capacitance	C_J 280 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 $150^\circ C$
Max thermal resistance — Junction to Case	$R_{\theta Jtab}$	$4^\circ C/W$



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05-30-07 Rev. 1

UPS6150

Figure 1
Typical Forward Characteristics – Per Leg

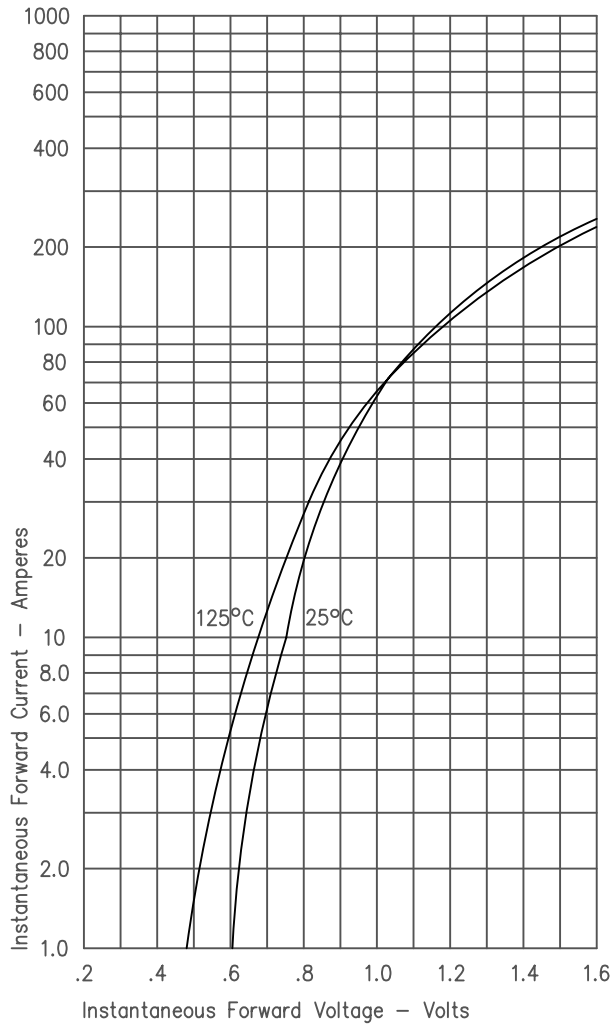


Figure 3
Typical Junction Capacitance – Per Leg

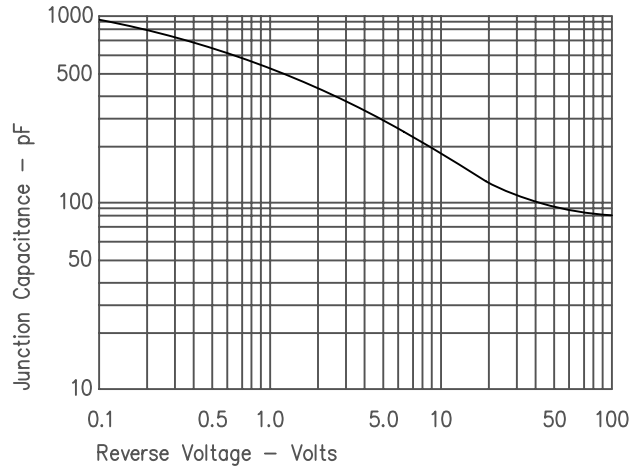


Figure 4
Forward Current Derating – Per Leg

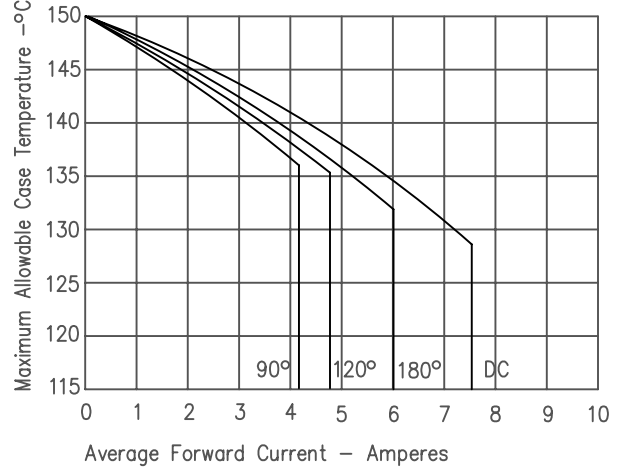


Figure 2
Typical Reverse Characteristics – Per Leg

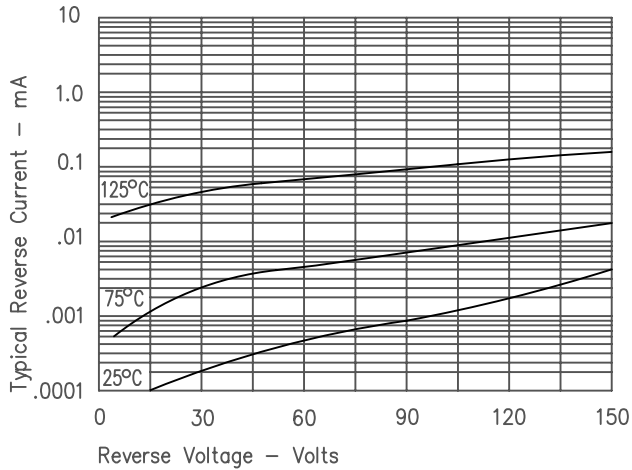


Figure 5
Maximum Forward Power Dissipation – Per Leg

