

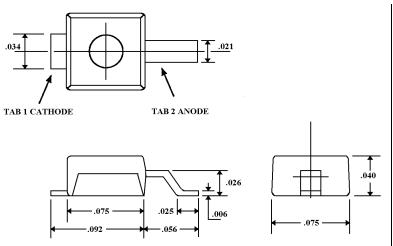
UPS120e3

1.0 A Schottky Barrier Rectifier

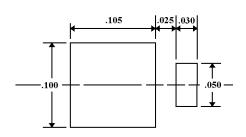
Parameter	Symbol	Conditions	$T_{\rm J} = 25^{\rm o}C$	T _J =85°C	Units
Maximum Forward Voltage (Note 1) See Figure 2	V_{F}	I _F = 0.1 A I _F = 1.0 A I _F = 3.0 A	0.34 0.45 0.65	0.25 0.415 0.67	٧
Maximum Instantaneous Reverse Current (Note 1)	I _R	V _R = 20 V V _R = 10 V	0.40 0.10	25 18	mA

Note: 1 Short duration test pulse used to minimize self – heating effect.

PACKAGE & MOUNTING PAD DIMENSIONS



DO-216 Package (All dimensions +/-.005 inches)



MOUNTING PAD in inches



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CHARTS AND GRAPHS

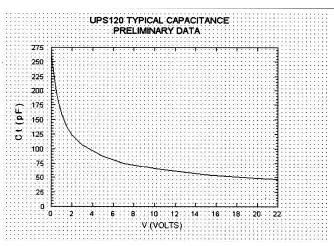


FIGURE 1

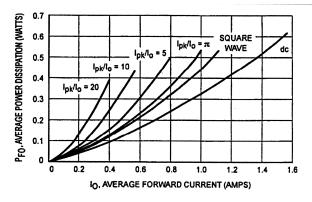


FIGURE 2
Forward Power Dissipation

* Reverse power dissipation and the possibility of thermal runaway must be considered when operating this device under any reverse voltage conditions. Calculations of T_J therefore must include forward and reverse power effects. The allowable operating T_J may be calculated from the equation:

 $T_J = T_{J \text{ max}} = r(t)(Pf+Pr)$ where

r(t) = thermal impedance under given conditions.

Pf = forward power dissipation, and

Pr = reverse power dissipation

This graph displays the derated allowable T_J due to reverse bias under DC conditions only and is calculated as $T_J = T_{J \text{ max}} - r(t)$ Pr, Where r(t)=Rthja. For other power applications further calculations must be performed.



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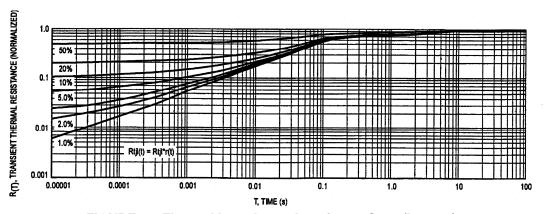


FIGURE 3 – Thermal Impedance Junction to Case (bottom)

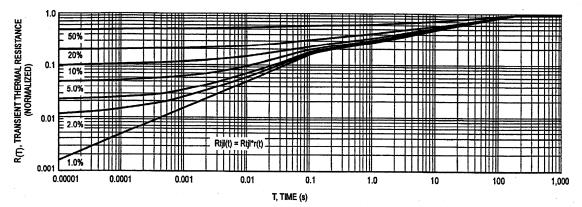


FIGURE 4 - Thermal Impedance Junction to Ambient