

### POWER DISCRETES

#### Description

Quick reference data

$$V_R = 600V$$

$$I_F = 2.0A$$

$$t_{rr} = 60nS$$

$$I_R = 1\mu A$$

#### Features

- ◆ Very low reverse recovery time
- ◆ Glass passivated for hermetic sealing
- ◆ Low switching losses
- ◆ Soft, non-snap off, recovery characteristics
- ◆ Avalanche capability

### Absolute Maximum Ratings

Electrical specifications @  $T_A = 25^\circ C$  unless otherwise specified.

	Symbol	2PFF6	Units
Working Reverse Voltage	$V_{RWM}$	600	V
Repetitive Reverse Voltage	$V_{RRM}$	600	V
Average Forward Current @ $55^\circ C$ , lead length 0.375"	$I_{F(AV)}$	2.0	A
Repetitive Surge Current @ $55^\circ C$ in free air, lead length 0.375"	$I_{FRM}$	9.0	A
Non-Repetitive Surge Current ( $t_p = 8.3mS$ @ $V_R$ & $T_{JMAX}$ )	$I_{FSM}$	45.0	A
Storage Temperature Range	$T_{STG}$	-55 to +175	$^\circ C$

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**Electrical Specifications**

	Symbol	2PFF6	Units
Average Forward Current max (pcb mounted; $T_A = 55^\circ\text{C}$ ) for sine wave for square wave ( $d = 0.5$ )	$I_{F(AV)}$ $I_{F(AV)}$	0.85 0.90	A
Average Forward Current max ( $T_L = 55^\circ\text{C}$ ; $L = 3/8"$ ) for sine wave for square wave	$I_{F(AV)}$ $I_{F(AV)}$	1.9 2.0	A
I <sup>2</sup> t for fusing ( $t = 8.3\text{mS}$ ) max	I <sup>2</sup> t	8.4	A <sup>2</sup> S
Forward Voltage Drop max. @ $I_F = 2.0\text{A}$ , $T_J = 25^\circ\text{C}$	$V_F$	2.1	V
Reverse Current typ. @ $V_{RWM}$ , $T_J = 25^\circ\text{C}$ @ $V_{RWM}$ , $T_J = 100^\circ\text{C}$	$I_R$ $I_R$	1 20	$\mu\text{A}$
Reverse Recovery Time max. 0.5A $I_F$ to 1.0A $I_{RM}$ recovers to 0.25A $I_{RM(REC)}$	trr	60	nS
Junction Capacitance typ. @ $V_R = 5\text{V}$ , $f = 1\text{MHz}$	$C_j$	40	pF

**Thermal Characteristics**

	Symbol	2PFF6	Units
Thermal Resistance-Junction to Lead Lead length = 0.375"	$R_{\theta JL}$	20	$^\circ\text{C/W}$

**Maximum Characteristics**

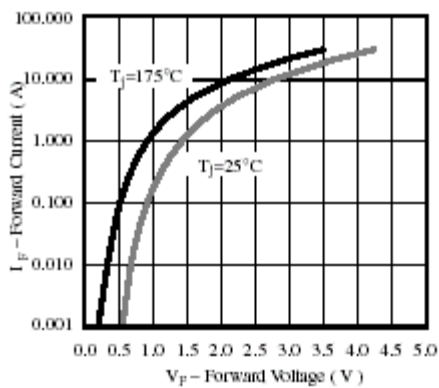


Figure 1. Forward Current vs. Forward Voltage

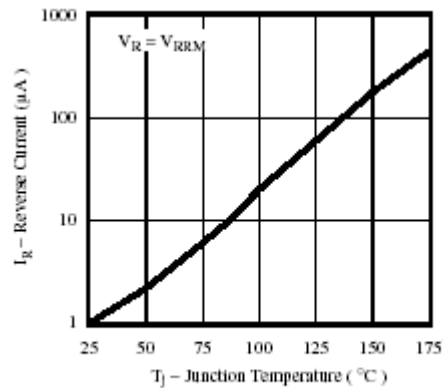


Figure 2. Reverse Current vs. Junction Temperature

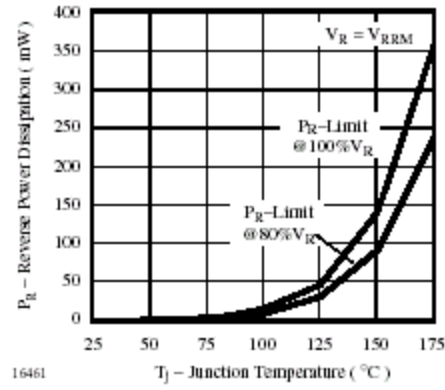
**POWER DISCRETES**
**Maximum Characteristics (Cont.)**


Figure 3. Max. Reverse Power Dissipation vs. Junction Temperature

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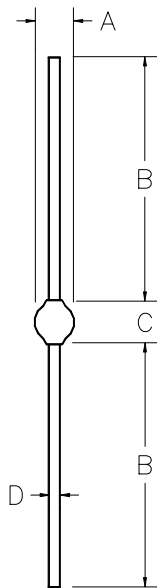
**Ordering Information**

Part Number	Description
2PFF6	Axial leaded hermetically sealed <sup>(1)</sup>

Note:

(1) Available in bulk and tape and reel packaging. Please consult factory for quantities.

**Outline Drawing**



Dimensions					
DIM <sup>N</sup>	Inches		Millimeters		Note
	MIN	MAX	MIN	MAX	
A	-	.177	-	4.50	-
B	1.02	-	26	-	-
C	-	.197	-	5.00	-
D	-	.053	-	1.35	-

Weight = 0.035oz

**Contact Information**

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