

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 ² t for fusing ($t = 8.3\text{mS}$) max	I ² t	8.4	A ² 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	μA
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	$^\circ\text{C/W}$

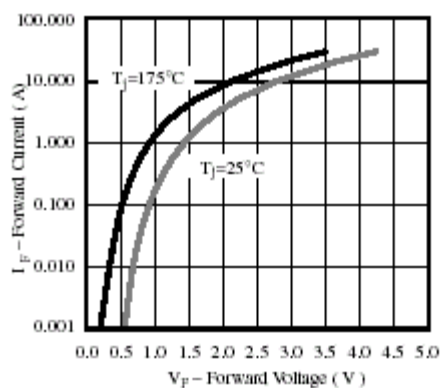
Maximum Characteristics


Figure 1. Forward Current vs. Forward Voltage

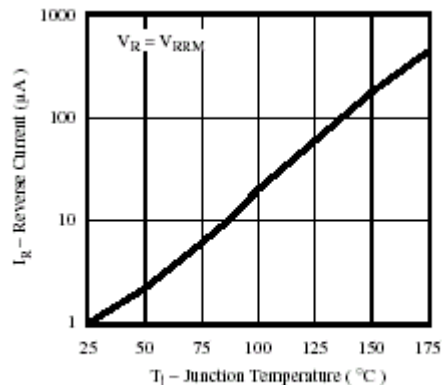


Figure 2. Reverse Current vs. Junction Temperature

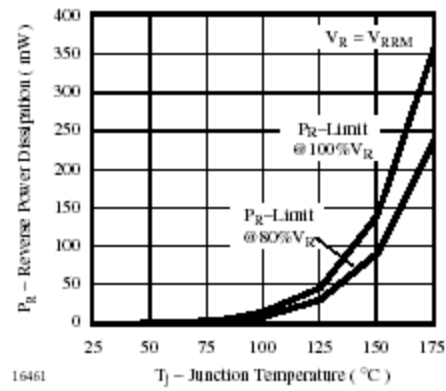
POWER DISCRETES
Maximum Characteristics (Cont.)


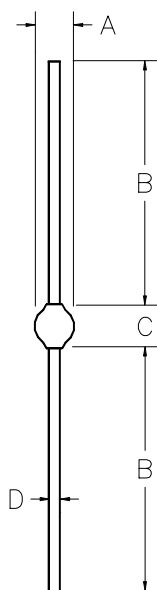
Figure 3. Max. Reverse Power Dissipation vs. Junction Temperature

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Ordering Information

Part Number	Description
2PFF6	Axial leaded hermetically sealed ⁽¹⁾

Note:

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

Outline Drawing


Dimensions					
DIM ^N	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