

POWER DISCRETES
Description

Quick reference data

$$V_R = 800 - 1000V$$

$$I_F = 1.0A$$

$$t_{rr} = 75nS$$

$$I_R = 1\mu A$$

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	PFF8	PFF0	Units
Working Reverse Voltage	V_{RWM}	800	1000	V
Average Forward Current @ $55^\circ C$, lead length 0.375"	$I_{F(AV)}$	1.0		A
Repetitive Surge Current @ $55^\circ C$ in free air, lead length 0.375"	I_{FRM}	4.25		A
Non-Repetitive Surge Current ($t_p = 8.3mS$ @ V_R & T_{JMAX})	I_{FSM}	22.0		A
Storage Temperature Range	T_{STG}	-55 to +175		$^\circ C$

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Electrical Specifications

	Symbol	PFF8	PFF0	Units
Average Forward Current max ($T_L = 55^\circ\text{C}$; $L = 3/8''$) for sine wave for square wave	$I_{F(AV)}$ $I_{F(AV)}$	1.0 1.0		A
Forward Voltage Drop typ. @ $I_F = 1.0\text{A}$, $T_j = 25^\circ\text{C}$	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	75		nS
Junction Capacitance typ. @ $V_R = 5\text{V}$, $f = 1\text{MHz}$	Cj	30		pF

Thermal Characteristics

	Symbol	PFF8, PFF0	Units
Thermal Resistance-Junction to Lead Lead length = 0.375"	$R_{\theta JL}$	47	$^\circ\text{C/W}$

Maximum Characteristics

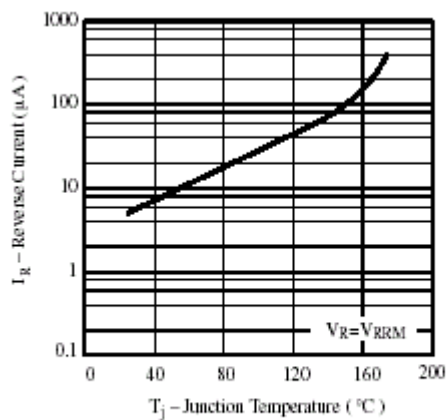


Figure 1. Max. Reverse Current vs. Junction Temperature

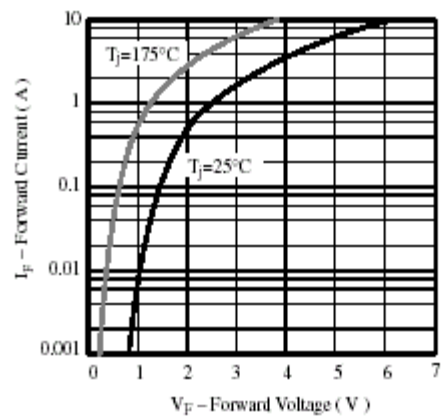


Figure 2. Max. Forward Current vs. Forward Voltage

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Maximum Characteristics (Cont.)

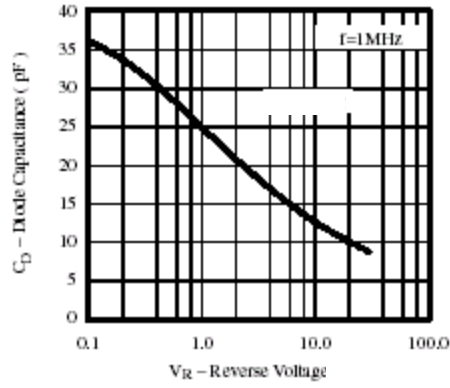


Figure 3. Diode Capacitance vs. Reverse Voltage

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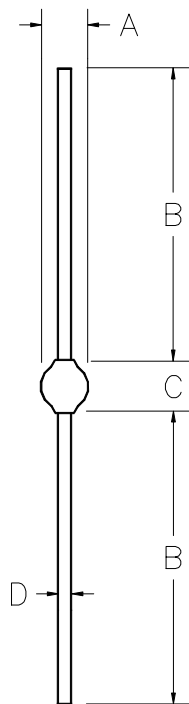
Ordering Information

Part Number	Description
PFF8, PFF0	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	-	.150	-	3.81	-
B	1.02	-	26	-	-
C	-	.180	-	4.57	-
D	-	0.032	-	0.82	-

Weight = 0.013oz

Contact Information

Semtech Corporation
 Power Discrettes Products Division
 200 Flynn Road, Camarillo, CA 93012
 Phone: (805)498-2111 FAX (805)498-3804