

**POWER DISCRETES**
**Description**

Quick reference data

$$V_R = 800 \text{ \& } 1000\text{V}$$

$$I_F = 1.8\text{A}$$

$$t_{rr} = 300\text{nS}$$

$$I_R = 1\mu\text{A}$$

**Features**

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

**Absolute Maximum Ratings**

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

	Symbol	PF8	PF0	Units
Working Reverse Voltage	$V_{RWM}$	800	1000	V
Repetitive Reverse Voltage	$V_{RRM}$	800	1000	V
Surge Reverse Voltage	$V_{RSM}$	900	1100	V
Average Forward Current @ $55^\circ\text{C}$ , lead length 0.375"	$I_{F(AV)}$	1.8		A
Non-Repetitive Surge Current ( $t_p = 8.3\text{mS}$ @ $V_R$ & $T_{JMAX}$ )	$I_{FSM}$	50		A
Storage Temperature Range	$T_{STG}$	-55 to +175		$^\circ\text{C}$

**POWER DISCRETES**
**Electrical Specifications**

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

	Symbol	PF8/PF0	Units
Average Forward Current max. (pcb mounted)	$I_{F(AV)}$	0.85	A
Average Forward Current max. L = 10mm	$I_{F(AV)}$	1.8	A
Forward Voltage Drop max. @ $I_F = 1.5\text{A}$ , $T_J = 25^\circ\text{C}$	$V_F$	1.35	V
Reverse Current max. @ $V_{RWM}$ , $T_J = 25^\circ\text{C}$ @ $V_{RWM}$ , $T_J = 100^\circ\text{C}$	$I_R$ $I_R$	1 15	$\mu\text{A}$
Reverse Recovery Time max. 0.5A $I_F$ to 1.0A $I_{RM}$ recovers to 0.25mA $I_{RM(REC)}$	trr	300	nS
Junction Capacitance typ. @ $V_R = 5\text{V}$ , $f = 1\text{MHz}$	$C_j$	18	pF

**Thermal Characteristics**

	Symbol	PF8/PF0	Units
Thermal Resistance-Junction to Lead Lead length = 0" Lead length = 0.375"	$R_{\theta JL}$	19 47	$^\circ\text{C/W}$

**POWER DISCRETES**

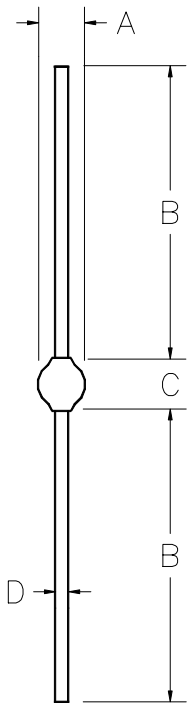
**Ordering Information**

Part Number	Description
PF8/PF0	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	-	0.150	-	3.81	-
B	1.014	-	26	-	-
C	-	0.180	-	4.57	-
D	-	0.032	-	0.82	-

Weight = 369mg

**Contact Information**

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