

POWER DISCRETES

Features

- ◆ Very Low Reverse Recovery Time
- ◆ Avalanche Capability
- ◆ Glass Passivated for Hermetic Sealing
- ◆ Low Switching Losses
- ◆ Soft, Non-snap off, Recovery Characteristics
- ◆ These diodes can also be available as screened F and FX level parts

Absolute Maximum Rating

Parameter	Symbol	Max	Units
Working reverse voltage	V_{RWM}	5000	V
Repetitive reverse voltage	V_{RRM}	5000	V
Average forward current (@55°C, lead length 0.375")	$I_{F(AV)}$	0.36	A
Repetitive surge current @25°C	I_{FRM}	4	A
Non-repetitive surge current @25°C ($t_p = 8.3ms$)	I_{FSM}	20	A
Storage temperature range	t_{STG}	-65 to +200	°C
Operating temperature range	T_{OP}	-65 to +175	°C

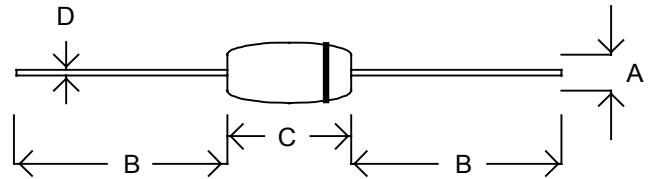
Thermal Characteristics

	Symbol	PFF50	Unit
Thermal Impedance	θ_{J-L}	L = 0.000, 3	°C/W
		L = 0.125, 6	°C/W
		L = 0.250, 12	°C/W

Electrical Characteristics

Parameter	Condition	Symbol	PFF50	Units
Average forward current	(max at 55°C)	$I_{F(AV)}$	0.36	A
	(max at 100°C)		0.18	
Forward voltage drop	(max @ $I_F = 0.2A$, $T_J = 25^\circ C$)	V_F	12.5	V
Reverse current	(max at V_{RWM} , $T_J = 25^\circ C$)	I_R	1	μA
	(max at V_{RWM} , $T_J = 100^\circ C$)		25	
Reverse recovery time	(0.5A I_F to 1.0A I_{RM} . Recover to 0.25A $I_{RM}(REC)$)	t_{rr}	35	ns
Junction capacitance (typ)	50V _{DC} @ 1kHz	C_J	16	pF

Outline Drawing



*Cathode denoted by a black band

DIM	MM		INCHES	
	Min	Max	Min	Max
A	-	5.5	-	0.215
B	25.4	33.02	1.0	1.3
C	-	8.89	-	0.350
D	0.94	1.1	0.037	0.043

Ordering Information

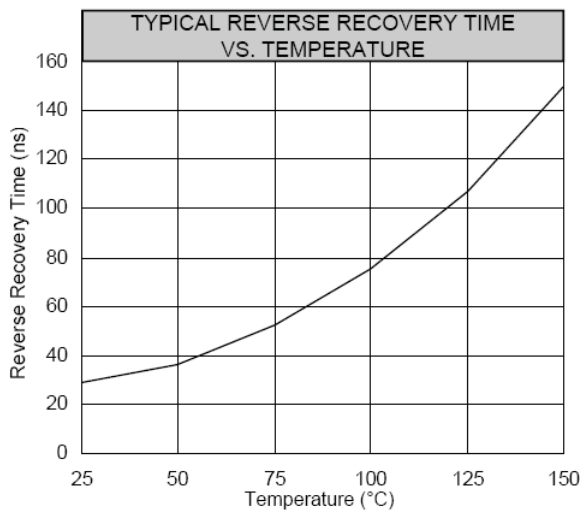
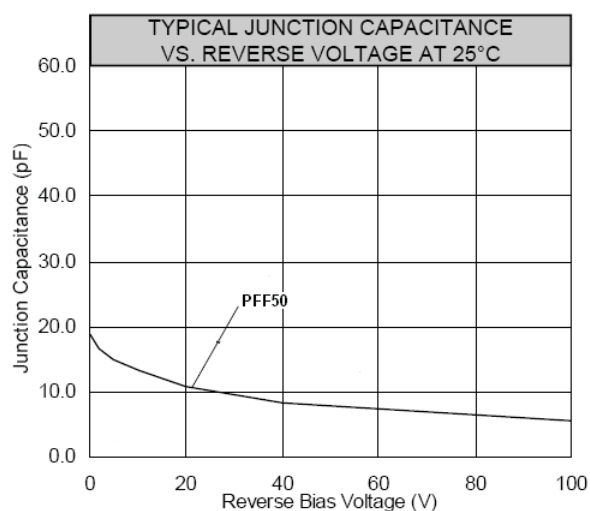
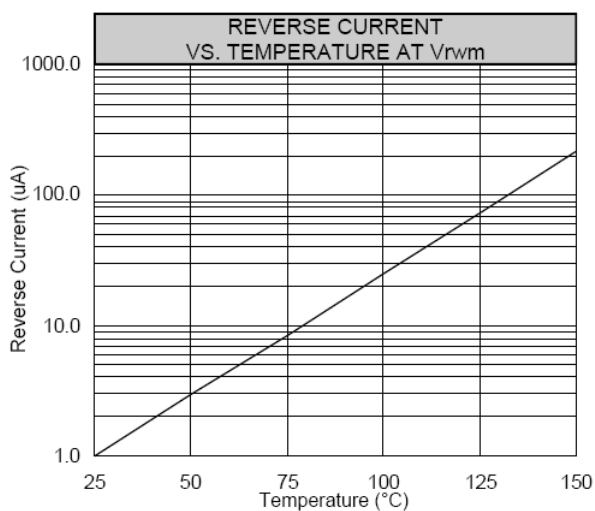
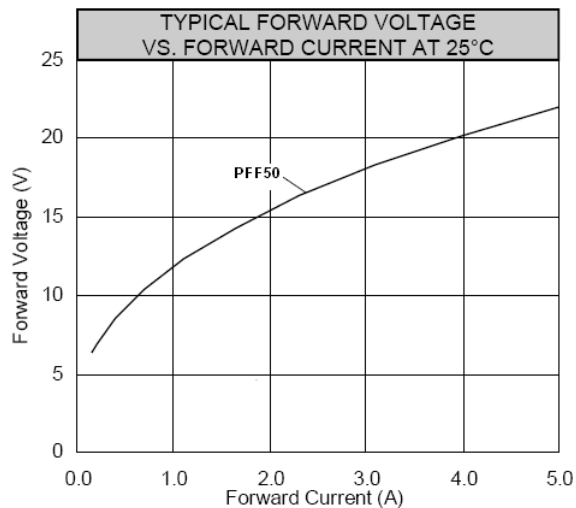
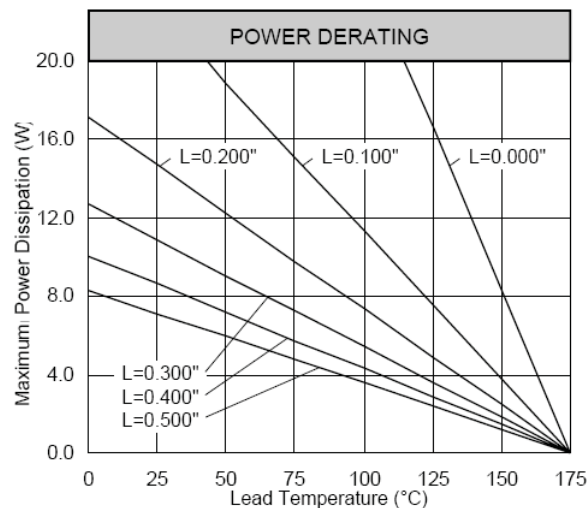
Part Number	Description
PFF50	Axial leaded, hermetically sealed high-voltage superfast rectifier diode ⁽¹⁾

Note:

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

POWER DISCRETES

Typical Characteristics



Contact Information

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