

POWER DISCRETES
Description

Quick reference data

$$V_R = 5 - 7.5\text{kV}$$

$$I_F = 92\text{mA}$$

$$t_{rr} = 250\text{nS}$$

$$I_R = 0.5\mu\text{A}$$

Features

- ◆ Low reverse recovery time
- ◆ Very low leakage current
- ◆ Glass passivated for hermetic sealing
- ◆ Soft, non-snap off, recovery characteristics
- ◆ Avalanche capability
- ◆ Please contact factory regarding HR screening

Absolute Maximum Ratings

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

	Symbol	PFM50A	PFM75A	Units
Working Reverse Voltage	V_{RWM}	5000	7500	V
Repetitive Reverse Voltage	V_{RRM}	5650	8500	V
Surge Reverse Voltage	V_{RSM}	5650	8500	V
Average Forward Current @ 55°C , in oil	$I_{F(AV)}$	92		mA
Repetitive Surge Current @ 55°C in oil, lead length 0.375"	$I_{F(AV)}$	1.0		A
Non-Repetitive Surge Current (tp = 8.3mS @ V_R & T_{JMAX})	I_{FSM}	2.0		A
Storage Temperature Range	T_{STG}	-65 to +150		$^\circ\text{C}$

POWER DISCRETES
Electrical Specifications

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

	Symbol	PFM50A/PFM75A	Units
Average Forward Current max. Unstirred oil @ 55°C	$I_{F(AV)}$	92	mA
Forward Voltage Drop max. @ $I_F = 25\text{mA}$, $T_J = 25^\circ\text{C}$	V_F	12.5	V
Reverse Current max. @ V_{RWM} , $T_J = 25^\circ\text{C}$ @ V_{RWM} , $T_J = 100^\circ\text{C}$	I_R I_R	0.5 20	μA
Reverse Recovery Time max. $50\text{mA } I_F$, $100\text{mA } I_R$, $25\text{mA } I_{RM(REC)}$	trr	250	nS
Junction Capacitance typ. @ $V_R = 50\text{V}$, $f = 1\text{KHz}$	C_j	2	pF

Thermal Characteristics

	Symbol	PFM50A/PFM75A	Units
Thermal Resistance-Junction to Oil Stirred oil Unstirred oil	$R_{\theta JO}$	48 64	$^\circ\text{C/W}$
Thermal Resistance-Junction to Ambient On 0.06" thick pcb. 1oz copper	$R_{\theta JA}$	160	$^\circ\text{C/W}$

POWER DISCRETES

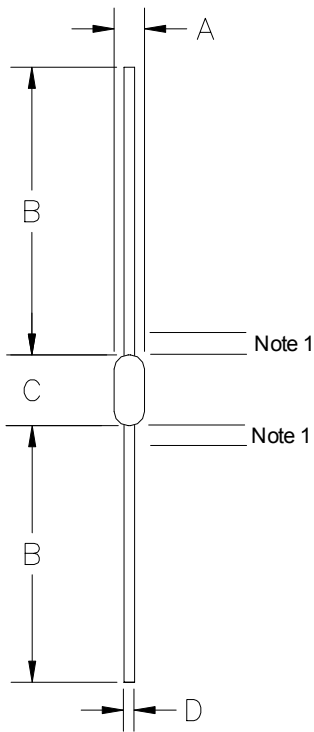
Ordering Information

Part Number	Description
PFM50A/PFM75A	Axial leaded hermetically sealed ⁽¹⁾

Note:

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

Outline Drawing



G82

DIM ^N	Dimensions				Note
	Inches		Millimeters		
	MIN	MAX	MIN	MAX	
A	-	.118	-	3.0	-
B	1.0	-	25.4	-	-
C	-	.374	-	9.5	-
D	-	0.033	-	0.84	-

Note:

1. Lead diameter not controlled in this area.

Contact Information

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 Power Discrettes Products Division
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Mouser Electronics

Authorized Distributor

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[PFM50A](#)