



180 Lafayette Road
North Hampton, NH 03862-2448
PH: 603-964-3165
FX: 603-964-3168
WWW.PDEELECTRONICS.COM

PD5802, PD5803, PD5804, PD5805, PD5806

Ultra Fast Diode

FEATURES

- Low Leakage Current
- High Surge Current Capable
- High Temp Metallurgically Bonded Construction
- Hermetically Sealed
- Low Thermal Resistance
- Low Forward Voltage
- High Current Capable
- Ultra Fast Recovery Time
- Cavity-Free, Glass Passivated



MAXIMUM RATINGS

Average Forward Current ($T_L=75^\circ\text{C}$).....2.5A
Forward Surge Current (8.3ms half sine).....45A
Junction Temperature..... -65°C to $+175^\circ\text{C}$
Storage Temperature..... -65°C to $+175^\circ\text{C}$
Thermal Resistance..... 26°C/W junction to lead
Capacitance.....40pF at 10 volts

ELECTRICAL CHARACTERISTICS

Part Number	Reverse Current (Max) (I_R @ V_{RWM})		Max Forward Voltage (V_F @ 1A) (8.3 ms pulse)		Working Peak Reverse Voltage (V_{RWM})	Average Rectified Forward Current (I_O) *		Reverse Recovery Time (t_{rr}) **	Surge Current (Max) (I_{FSM}) ***
	$T_A=25^\circ\text{C}$	$T_A=100^\circ\text{C}$	$T_A=25^\circ\text{C}$	$T_A=100^\circ\text{C}$		$T_L=75^\circ\text{C}$	$T_A=55^\circ\text{C}$	$T_A=25^\circ\text{C}$	$T_A=25^\circ\text{C}$
PD5802 PD5803 PD5804 PD5805 PD5806	.5 μA	25 μA	.860V	.770V	50V 75V 100V 125V 150V	2.5A	1.3A	25ns	45A

* 3/8 inch lead length.

** $I_F = 0.5\text{A}$, $I_{RM} = 1\text{A}$, $I_{R(REC)} = 0.25\text{A}$

*** $I_O = 2\text{A}$ and V_{RWM} for 8.3ms surge

Specifications subject to change without notice to ensure a better product

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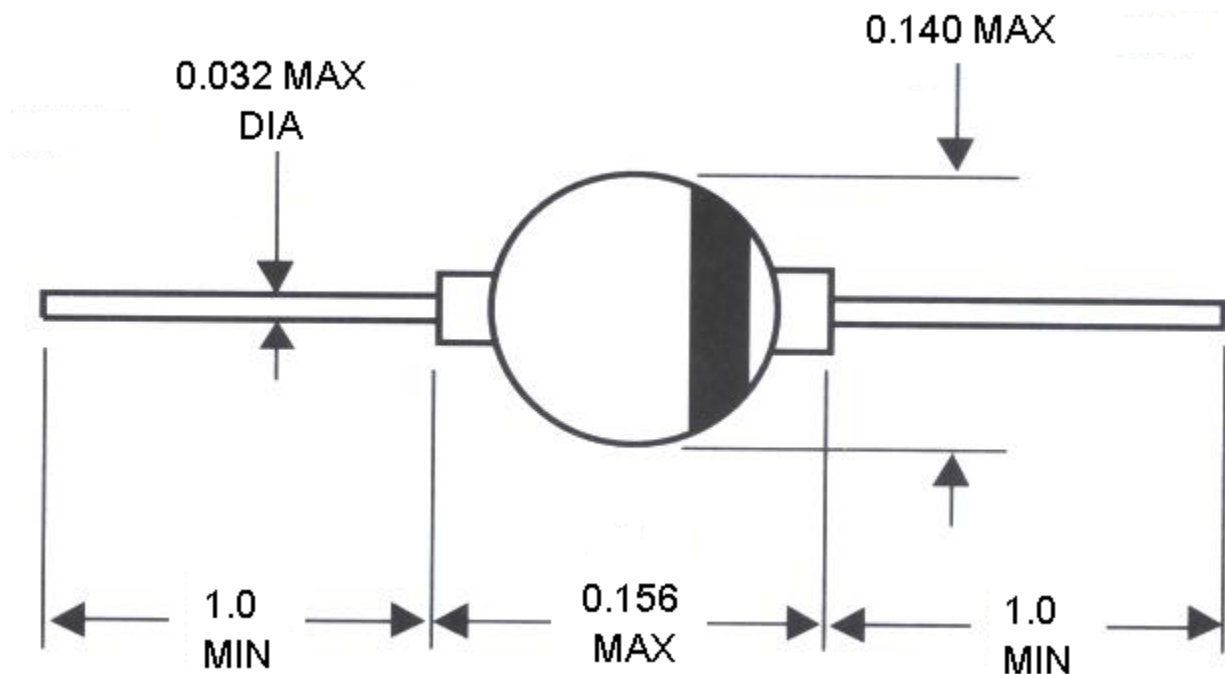
MECHANICAL DATA

Case: Voidless Hard Glass Case

Terminals: Plated Axial Leads

Polarity: Cathode Band

PACKAGE DIMENSIONS (in inches)



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