



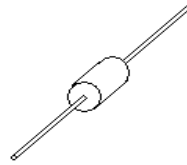
180 Lafayette Road  
 North Hampton, NH 03862-2448  
 PH: 603-964-3165  
 FX: 603-964-3168  
 WWW.PDEELECTRONICS.COM

## Miniature Fast Switching Rectifier

### PD4148

#### FEATURES

- 100V Reverse Voltage
- Hermetically Sealed
- Miniature Package
- Fast Switching



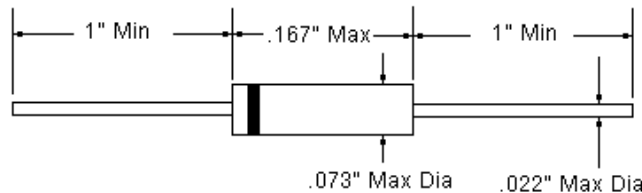
#### MAXIMUM RATINGS

	Conditions	Symbol	Limit	Units
Repetitive Peak Forward Surge Current		$I_{FRM}$	450	mA
Continuous Forward Current	$L=10\text{mm}$	$I_F$	200	mA
Non-Repetitive Peak Forward Current	$t = 1\text{ms}$	$I_{FSM}$	1	A
Total Power Dissipation	$T_{amb} = 25^\circ\text{C}$	$P_{tot}$	500	mW
Repetitive Peak Reverse Voltage		$V_{RRM}$	100	V

#### ELECTRICAL SPECIFICATIONS ( $T_A=25^\circ\text{C}$ unless specified otherwise)

	Conditions	Symbol	Limit	Units
Instantaneous Forward Voltage	$I_f = 10\text{ mA}$	$V_F$	1.0	V
DC Reverse Current	$V_r = 20\text{ V}$	$I_R$	25.0	nA
DC Reverse Current	$V_r = 20\text{ V}$ $T_j = 150^\circ\text{C}$	$I_R$	50.0	$\mu\text{A}$
Reverse Recovery Time	$I_F = 10\text{mA}$ to $I_R = 60\text{mA}$ to $I_R = 1\text{mA}$	$T_{rr}$	4	nS
Forward Recovery Voltage	Switch from $I_F = 50\text{mA}$ , $t_r = 20\text{ ns}$	$V_{fr}$	2.5	V
Diode Capacitance	$F = 1\text{ MHz}$ , $V_r = 0\text{V}$	$C_d$	4	pF

#### MECHANICAL SPECIFICATIONS



Marking:  
 Cathode Band  
 41  
 48

#### THERMAL SPECIFICATIONS

Storage Temperature.....	-65°C to +200°C
Junction Temperature.....	+200°C Max
Thermal Resistance from Junction to ambient ( $L=10\text{mm}$ ).....	350 C/W

Specifications subject to change without notice to ensure a better product  
**PD&E Electronics** 180 Lafayette Rd. North Hampton, NH 03862  
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