WON-TOP ELECTRONICS

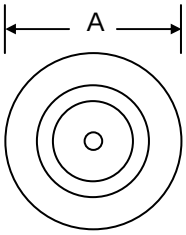
PF5000 – PF5006

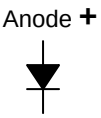
50A 1/2" PRESS-FIT DIODE

RoHS Pb

Features

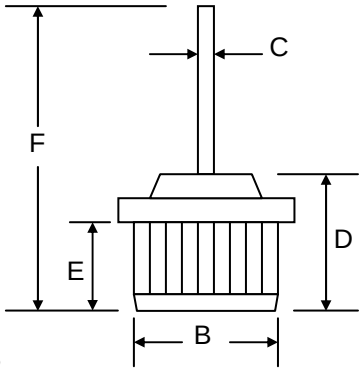
- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical I_R less than 5.0μA





Mechanical Data

- Case: DO-21, Copper Case and Components Hermetically Sealed
- Terminals: Contact Areas Readily Solderable
- Polarity: Cathode to Case (Reverse Units Are Available Upon Request and Are Designated By A "R" Suffix, i.e. PF5002R or PF5004R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 2**



DO-21		
Dim	**Min**	**Max**
A	15.77	15.97
B	12.73	12.82
C	1.25	1.31
D	9.55	9.85
E	5.70	5.90
F	28.00	—
All Dimensions in mm		

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

Characteristic	Symbol	PF5000	PF5001	PF5002	PF5003	PF5004	PF5005	PF5006	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	300	400	500	600	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	210	280	350	420	V
Average Rectified Output Current @T_C = 150°C	I_O	50							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	500							A
Forward Voltage @I_F = 50A	V_{FM}	1.0							V
Peak Reverse Current @T_A = 25°C At Rated DC Blocking Voltage @T_A = 100°C	I_{RM}	5.0 500							μA
Typical Junction Capacitance (Note 1)	C_J	400							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JC}$	1.0							°C/W
Operating and Storage Temperature Range	T_J, T_{STG}	-65 to +175							°C

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance: Junction to case, single side cooled.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
PF5000	DO-21 Press-Fit	120 Units/Box
PF5001	DO-21 Press-Fit	120 Units/Box
PF5002	DO-21 Press-Fit	120 Units/Box
PF5003	DO-21 Press-Fit	120 Units/Box
PF5004	DO-21 Press-Fit	120 Units/Box
PF5005	DO-21 Press-Fit	120 Units/Box
PF5006	DO-21 Press-Fit	120 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, PF5000-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.

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