

# PFS5020, PFS5024, PFS5036

## 50A AVALANCHE 1/2" RUGGED LEAD PRESS-FIT DIODE

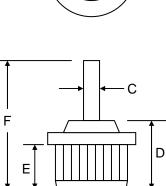


#### Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than 200nA
- Rugged 2.54mm Dia. Lead

### **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
- Available Opon Request and Are Designated By A "R" Suffix, i.e. PFS5020R or PFS5024R)
   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



В

А

DO-21 Rugged Lead					
Dim	Min Max				
Α	15.77	15.97			
в	12.73	12.82			
С	2.54 Ø Typical				
D	9.55	9.85			
Е	5.70	5.90			
F	22.55	22.85			
All Dimensions in mm					

Anode +

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

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

Characteristic		Symbol	PFS5020	PFS5024	PFS5036	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage		Vrrm Vrwm Vr	16	20	32	V
Average Rectified Output Current	@T <sub>c</sub> = 150°C	lo	50			А
Breakdown Voltage Min. Breakdown Voltage Max.	@I <sub>R</sub> = 100mA @I <sub>R</sub> = 100mA	Vbr	20 26	24 32	36 42	V
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superin Rated Load (JEDEC Method)		IFSM		500		A
Forward Voltage	@I <sub>F</sub> = 50A	Vfm	1.0		V	
Peak Reverse Current At Rated DC Blocking Voltage	@T <sub>A</sub> = 25°C	lгм	200			nA
Typical Junction Capacitance (Note 1)		CJ	400		pF	
Typical Thermal Resistance (Note 2)		R JC	1.0		°C/W	
Operating and Storage Temperature Range		TJ, TSTG	-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.



#### **ORDERING INFORMATION**

Product No.	Package Type	Shipping Quantity		
PFS5020	DO-21 Rugged Lead Press-Fit	120 Units/Box		
PFS5024	DO-21 Rugged Lead Press-Fit	120 Units/Box		
PFS5036	DO-21 Rugged Lead 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, PFS5020-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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