## Features

- Diffused Junction
- Low Leakage
- Low Cost
- High Surge Current Capability
- Typical IR less than $10 \mu \mathrm{~A}$


## Mechanical Data

- Case: All 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 An "R" Suffix, i.e. PF2502R or PF2510R)
- Polarity: Red Color Equals Standard, Black Color Equals Reverse Polarity
- Mounting Position: Any


| DO-21 |  |  |
| :---: | :---: | :---: |
| Dim | Min | Max |
| A | 15.63 | 16.14 |
| B | 12.75 | 12.83 |
| C | 8.89 | 10.04 |
| D | 1.25 | 1.30 |
| E | 3.05 | 3.30 |
| F | 5.59 | 6.1 |
| G | 28.82 | - |
| All Dimensions in $\mathbf{~ m m}$ |  |  |

## Maximum Ratings and Electrical Characteristics $@ T_{A}=25^{\circ} \mathrm{C}$ unless otherwise speciified

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

| Characteristic | Symbol | PF2500 | PF2501 | PF2502 | PF2504 | PF2506 | PF2508 | PF2510 | Unit |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | VRRM <br> Vrwm $V_{R}$ | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| RMS Reverse Voltage | V R(RMS) | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Average Rectified Output Current $@ \mathrm{~T}_{\mathrm{A}}=150^{\circ} \mathrm{C}$ | Io | 25 |  |  |  |  |  |  | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | IFSM | 400 |  |  |  |  |  |  | A |
| Forward Voltage $@_{\text {F }}=50 \mathrm{~A}$ | VFM | 1.08 |  |  |  |  |  |  | V |
| Peak Reverse Current <br> $@ T_{A}=25^{\circ} \mathrm{C}$ <br> At Rated DC Blocking Voltage <br> $@ T_{A}=100^{\circ} \mathrm{C}$ | IRM | $\begin{gathered} 10 \\ 500 \end{gathered}$ |  |  |  |  |  |  | $\mu \mathrm{A}$ |
| Typical Junction Capacitance (Note 1) | $\mathrm{C}_{\mathrm{j}}$ | 300 |  |  |  |  |  |  | pF |
| Typical Thermal Resistance Junction to Case (Note 2) | $\mathrm{R}_{\theta} \mathrm{JC}$ | 1.2 |  |  |  |  |  |  | K/W |
| Operating and Storage Temperature Range | TJ, Tsta | -65 to +175 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |

## *Glass passivated forms are available upon request

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 |
| :--- | :---: | :---: |
| PF2500 | Press Fit | 100 Units/Tray |
| PF2501 | Press Fit | 100 Units/Tray |
| PF2502 | Press Fit | 100 Units/Tray |
| PF2504 | Press Fit | 100 Units/Tray |
| PF2506 | Press Fit | 100 Units/Tray |
| PF2508 | Press Fit | 100 Units/Tray |
| PF2510 | Press Fit | 100 Units/Tray |

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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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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