

## BRxXF SERIES

2 to $10 \mathrm{kV}, 600$ to $1500 \mathrm{~mA}, 40 \mathrm{nS}$
Axial Lead Medium Current Diodes

## Features

- Faster Reverse Recovery Than Regular BR Series
- Higher Forward Surge (Ifsm) Rating
- Lower Leakage Current
- Molded Plastic Body, ANSI/UL94 V-0 Rated Material


## Specifications ${ }^{1}$

| Part <br> Number | $\begin{gathered} \text { VRRM } \\ \mathbf{V} \end{gathered}$ | $\begin{gathered} \mathrm{I}_{\text {FAVM }} \\ \mathrm{mA} \end{gathered}$ | $\begin{aligned} & \mathbf{V}_{\mathbf{F}} \\ & \hline \end{aligned}$ | $\begin{aligned} & \mathrm{I}_{\mathrm{R}} \\ & \mu \mathrm{~A} \end{aligned}$ | $\underset{\mathrm{A}}{\mathrm{I}}$ | $\begin{aligned} & C_{J} \\ & \mathrm{pF} \end{aligned}$ | $\begin{gathered} T_{R R} \\ \mathrm{nS} \end{gathered}$ | $\begin{gathered} \mathrm{L} \\ \text { in. } \end{gathered}$ | $\begin{aligned} & \text { D } \\ & \text { in. } \end{aligned}$ | $\begin{aligned} & \text { d } \\ & \text { in. } \end{aligned}$ | in. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| BR2XF | 2000 | 1500 | 2.6 | 2 | 80 | 20.0 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR3XF | 3000 | 1400 | 3.1 | 2 | 80 | 20.0 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR4XF | 4000 | 1000 | 7.6 | 2 | 70 | 13.0 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR5XF | 5000 | 900 | 8.3 | 2 | 70 | 13.0 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR6XF | 6000 | 800 | 9.3 | 2 | 60 | 10.2 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR8XF | 8000 | 700 | 11.3 | 2 | 60 | 8.0 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |
| BR10XF | 10000 | 600 | 13.9 | 2 | 50 | 6.5 | 40 | 0.354 | 0.197 | 0.05 | 0.94 |


| Temperature ${ }^{\circ} \mathrm{C}$ |  |
| :--- | :--- |
| Storage Temperature | -55 to 175 |
| Operating Temperature | -55 to 150 |
| Maximum Junction Temperature | 150 |

${ }^{1} 25^{\circ} \mathrm{C}$ ambient temperature unless stated otherwise.

## Drawings



Dimensions in inches, tolerances $\pm 0.020$ except as noted

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## Specification Definitions

|  | Specifications | Conditions |
| :---: | :---: | :---: |
| VRRM | Maximum Repetitive Reverse Voltage | - |
| Ifavm | Maximum Average Forward Current | At $\mathrm{T}_{\mathrm{A}}=55^{\circ} \mathrm{C}$ in Oil |
| $\mathrm{V}_{\mathrm{F}}$ | Maximum Forward Voltage Drop | At liavm |
| IR | Maximum Leakage Current | At Vrrm |
| Ifsm | Maximum Surge Current | At 8.3 mS , Single Half Sine |
| CJ | Typical Junction Capacitance | At $\mathrm{V}_{\mathrm{R}}=0 \mathrm{VDC}, \mathrm{f}=1 \mathrm{MHz}$ |
| TRR | Maximum Reverse Recovery Time | $\mathrm{I}_{\text {F }}=0.5 \mathrm{I}_{\text {FAVM }} ; \mathrm{I}_{\text {R }}=-\mathrm{I}_{\text {FAVM }} ; \mathrm{I}_{\text {RR }}=-0.25 \mathrm{I} \mathrm{IAVM}$ |

