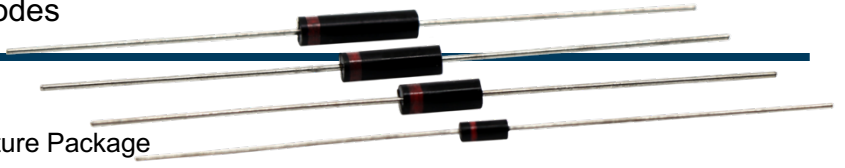




XNV SERIES

2 to 5kV, 120 to 250mA, 70nS
XOE Axial Lead Diodes



Features

- High Voltage, Higher Current Diodes in Subminiature Package
- Utilizes DTI's High Performance XOE™ Technology
- Molded Plastic Body, ANSI/UL94 V-0 Rated Material

Specifications¹

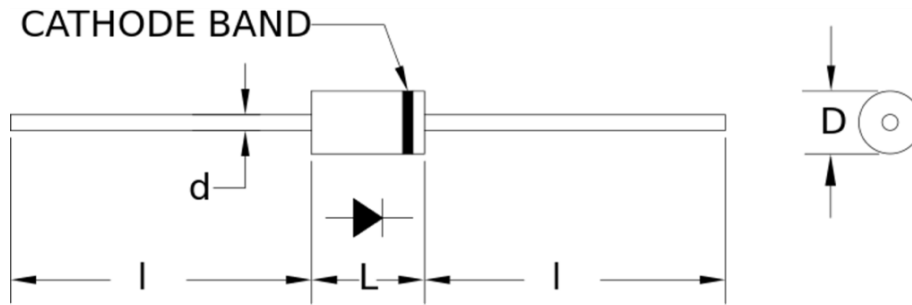
| Part Number | V _{RRM} V | I _{FAVM1} mA | I _{FAVM2} mA | V _F V | I _R μA | I _{FSM} A | C _J ² pF | T _{RR} nS | R _{θJA} °C/W | E _{RSM} mJ | L in. | D in. | d in. | I in. |
|-------------|--------------------|-----------------------|-----------------------|------------------|-------------------|--------------------|--------------------------------|--------------------|-----------------------|---------------------|-------|-------|-------|-------|
| XNV02 | 2000 | 250 | 130 | 5.4 | 0.02 | 5 | 2.8 | 70 | 150 | 30 | 0.12 | 0.08 | 0.02 | 1.0 |
| XNV03 | 3000 | 200 | 100 | 7.1 | 0.02 | 5 | 2.3 | 70 | 150 | 40 | 0.12 | 0.08 | 0.02 | 1.0 |
| XNV04 | 4000 | 160 | 80 | 9.1 | 0.02 | 5 | 1.7 | 70 | 150 | 50 | 0.12 | 0.08 | 0.02 | 1.0 |
| XNV05 | 5000 | 120 | 60 | 10.3 | 0.02 | 5 | 1.4 | 70 | 150 | 60 | 0.12 | 0.08 | 0.02 | 1.0 |

| Temperature °C | |
|------------------------------|------------|
| Operating Temperature | -55 to 125 |
| Storage Temperature | -55 to 175 |
| Maximum Junction Temperature | 125 |

¹125°C ambient temperature unless stated otherwise.

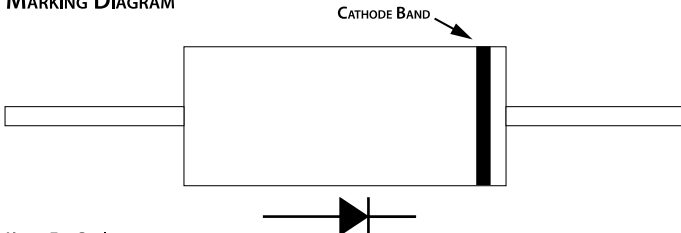
²Check Specification Definitions for conditions details.

Drawings

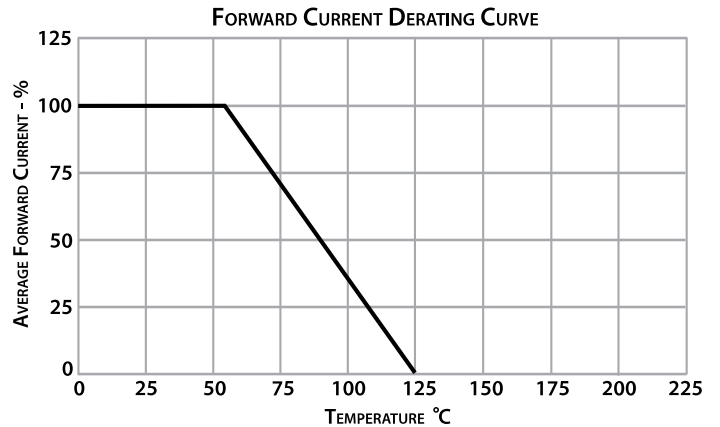


Dimensions in inches, tolerances ±0.020 except as noted

MARKING DIAGRAM



MARKING TYPE: RED, INKJET
(MARKINGS WILL WRAP ENTIRE BODY OF DIODE AND ARE SUBJECT TO MINOR CHANGES)

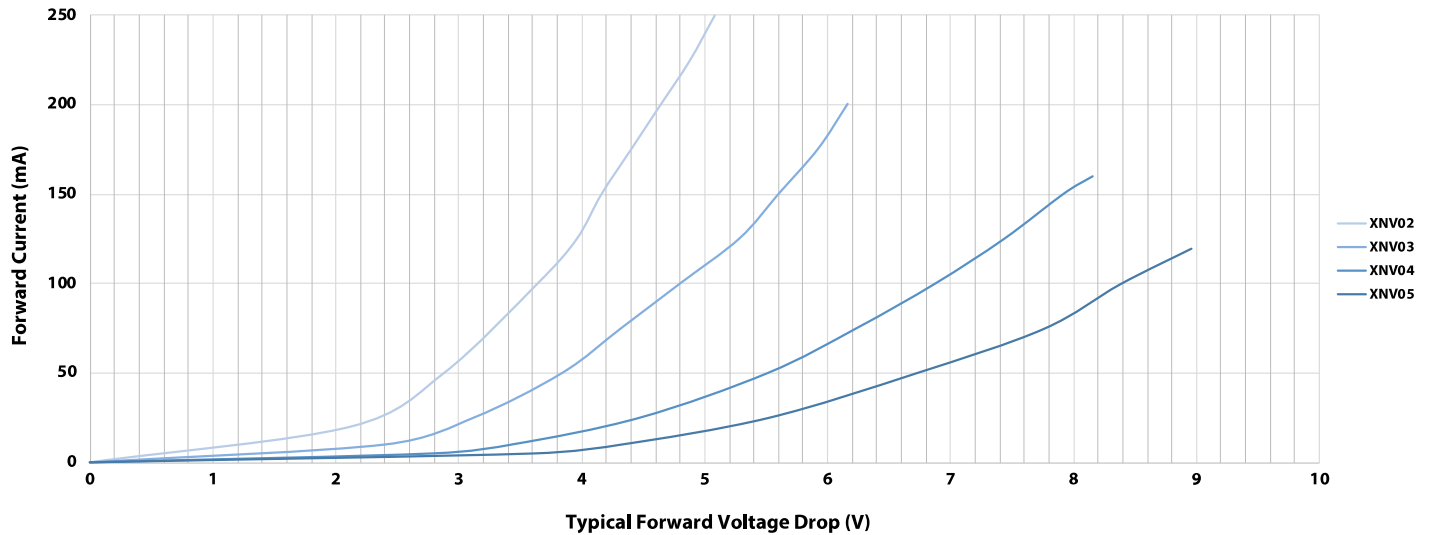


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EFFECTIVE: 12 AUGUST 2021
PAGE: 1 OF 2

**Forward Current vs. Typical Forward Voltage Drop, $T_A = 25^\circ\text{C}$
XNV Series**



Specification Definitions

| Specifications | | Conditions |
|-----------------|------------------------------------|---|
| V_{RRM} | Maximum Repetitive Reverse Voltage | - |
| I_{FAVM1} | Maximum Average Forward Current | At $T_A = 55^\circ\text{C}$, in Oil |
| I_{FAVM2} | Maximum Average Forward Current | At $T_A = 55^\circ\text{C}$ |
| V_F | Maximum Forward Voltage Drop | At I_{FAVM1} , $t_{PW} = 100\mu\text{sec}$ |
| I_R | Maximum Leakage Current | At V_{RRM} |
| I_{FSM} | Maximum Surge Current | At 8.3mS, Single Half Sine |
| C_J | Typical Junction Capacitance | At $V_R = 4\text{VDC}$, $f = 1\text{MHz}$ |
| T_{RR} | Maximum Reverse Recovery Time | $I_F = 0.5 I_{FAVM1}$; $I_R = -I_{FAVM1}$; $I_{RR} = -0.25 I_{FAVM1}$ |
| $R_{\theta JA}$ | Typical Thermal Resistance | Junction to Ambient, in Air |
| E_{RSM} | Maximum Reverse Energy Withstand | - |

Note: Specifications subject to change without notice. Photo is representation only.

