

# XNV05

5KV, 60 mA  
Fast Recovery  
High Voltage Diode



## Features

- High voltage, higher current diode in small form factor
- Molded plastic body, ANSI/UL94 V-0 rated material
- Uses new Dean Technology, XOE Technology
- RoHS compliant to Directive 2011/65/EC, Article 4(1), Annex II; Annex III, 7(a) and EU RoHS Directive (EU) 2015/863 of March 2015, Amending Annex II.

Device Electrical Characteristics*	Conditions	Symbol	Value
Maximum Repetitive Peak Reverse Voltage	-	$V_{RRM}$	5,000 Volts
Average Forward Current maximum	$T_{AIR} = 55^{\circ}C$	$I_{FAVM}$	60 mA
Average Forward Current maximum	$T_{OIL} = 55^{\circ}C$	$I_{FAVM(oil)}$	120 mA
Maximum Forward Voltage Drop	$I_F = I_{FAVM(oil)}, t_{PW} = 100\mu sec$	$V_F$	10.3 Volts
Typical Thermal Resistance (junction to ambient)	In air	$R\theta_{JA}$	150 $^{\circ}C/W$
Maximum Surge Current rating	8.3msec, half sine	$I_{FSM}$	5 Amps
Maximum Reverse Current	at rated $V_{RRM}$	$I_R$	0.02 $\mu A$
Maximum Reverse Recovery Time	$I_F=0.5I_R; I_R=- I_{FAVM(oil)}; I_{RR}=-0.25I_R$	$TRR$	70 ns
Maximum Reverse Energy Withstand	-	$E_{RSM}$	60 mJ
Typical Junction Capacitance	$f = 1Mhz, V_r = 4VDC$	$C_j$	1.4 pF
Maximum Junction Temperature	-	$T_j$	125 $^{\circ}C$
Storage Temperature Range	-	$T_{STG}$	-55 $^{\circ}C$ to 175 $^{\circ}C$

(\*Note: 25 $^{\circ}C$  ambient temperature unless stated otherwise.)

Mechanical Data		Min.		Max.	
		in.	mm	in.	mm
Body length	<b>L</b>	-	-	0.12	3.0
Body diameter	<b>D</b>	-	-	0.08	2.0
Lead length	<b>l</b>	1.0	25.4	-	-
Lead diameter	<b>d</b>	-	-	0.020	0.5



