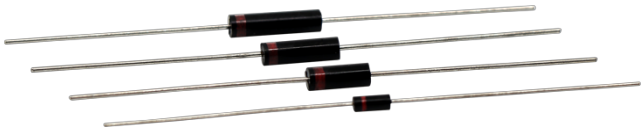
EXTREME OPTIMIZED EFFICIENCY

XGF06

6KV, 150 mA
Fast Recovery
High Voltage Diode

Features

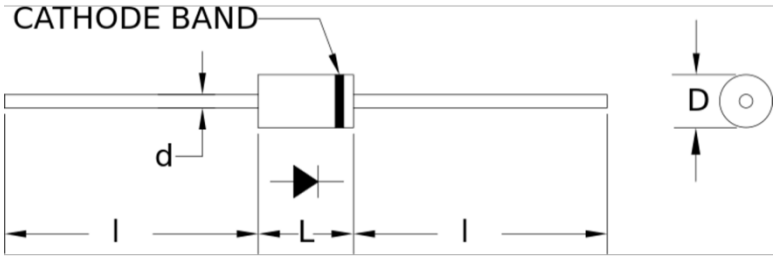


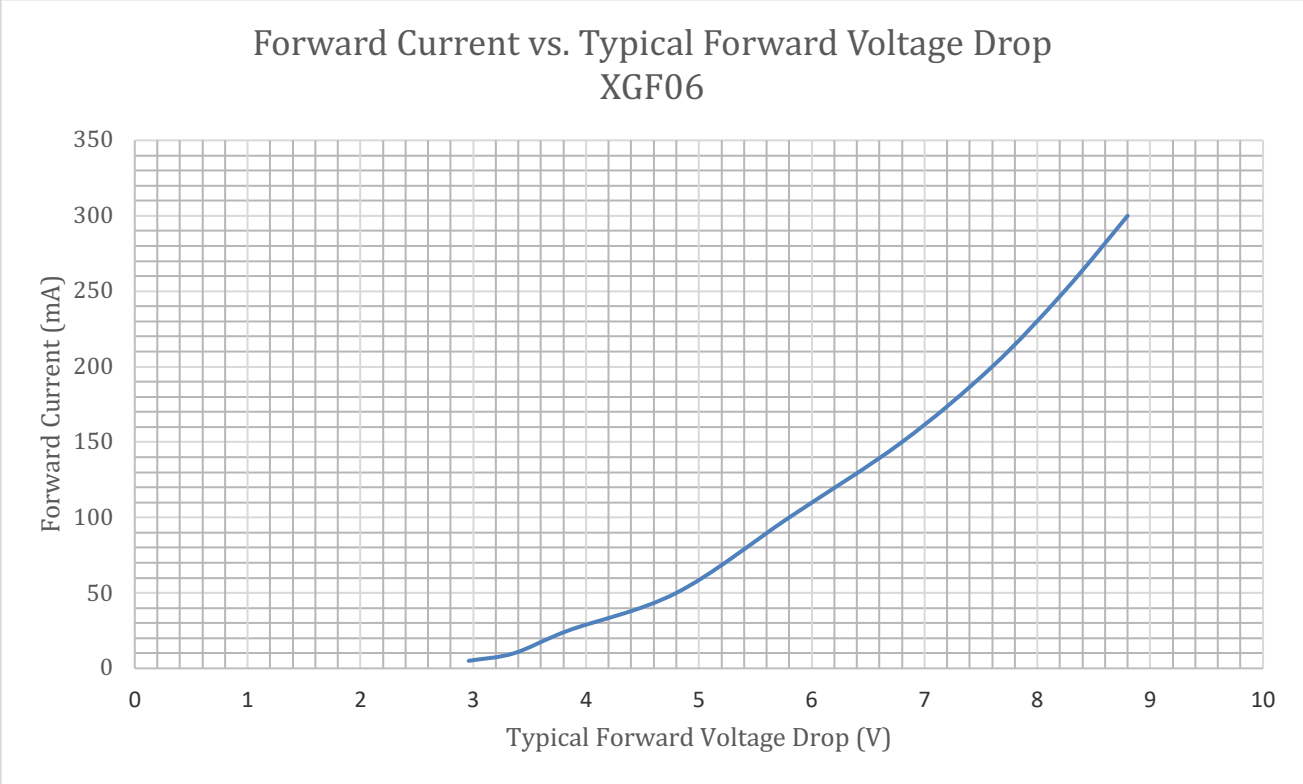
- High voltage, higher current diode in small form factor
- Molded plastic body, ANSI/UL94 V-0 rated material
- Uses new Dean Technology, XOE Technology
- RoHS compliant to Directive 2011/65/EC, Article 4(1), Annex II; Annex III, 7(a) and EU RoHS Directive (EU) 2015/863 of March 2015, Amending Annex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

Device Electrical Characteristics*	Conditions	Symbol	Value
Maximum Repetitive Peak Reverse Voltage	-	V_{RRM}	6,000 Volts
Average Forward Current maximum	T_{AIR} = 55°C	I_{FAVM}	150 mA
Average Forward Current maximum	T_{OIL} = 55°C	I_{FAVM}	300 mA
Maximum Forward Voltage Drop	I_F = 300 mA, t_{PW} = 100µsec	V_F	10.2 Volts
Typical Thermal Resistance *(junction to ambient)*	In air	$R\Theta_{JA}$	73 °C/W
Maximum Surge Current rating	8.3msec, half sine	I_{FSM}	15 Amps
Maximum Reverse Current	at rated V_{RRM}	I_R	0.2 µA
Maximum Reverse Recovery Time	IF=75mA; IR=-150mA; IRR=-37mA	TRR	80 ηs
Maximum Reverse Energy Withstand	-	E_{RSM}	200 mJ
Typical Junction Capacitance	f = 1Mhz, Vr = 0VDC	C_J	5.4 pF
Maximum Junction Temperature	-	T_J	125°C
Storage Temperature Range	-	T_{STG}	-55°C to 175°C

*(*Note: 25°C ambient temperature unless stated otherwise.)*

Mechanical Data		Min.		Max.	
		in.	mm	in.	mm
Body length	L	-	-	0.32	8
Body diameter	D	-	-	0.12	3.0
Lead length	l	1.0	25.4	-	-
Lead diameter	d	-	-	0.025	0.6




Forward Current vs. Typical Forward Voltage Drop
XGF06
Forward Current (mA)
350
300
250
200
150
100
50
0
0
1
2
3
4
5
6
7
8
9
10
Typical Forward Voltage Drop (V)