



XGF12
12KV, 90 mA
Fast Recovery
High Voltage Diode

Features

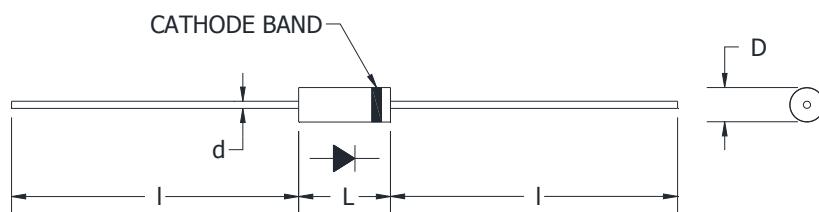
- High voltage, higher current diode in small form factor
- Molded plastic body, ANSI/UL94 V-0 rated material
- Uses new Dean Technology, XOE Technology
- RoHS compliant to Directive 2011/65/EC, Article 4(1), Annex II; Annex III, 7(a) and EU RoHS Directive (EU) 2015/863 of March 2015, Amending Annex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



DEVICE ELECTRICAL CHARACTERISTICS*	Conditions	Symbol	Value
Maximum Repetitive Peak Reverse Voltage	-	V_{RRM}	12,000 Volts
Average Forward Current Maximum	$T_{AIR} = 55^\circ\text{C}$	I_{FAVM}	90 mA
Average Forward Current Maximum	$T_{OIL} = 55^\circ\text{C}$	I_{FAVM}	180 mA
Maximum Forward Voltage Drop	$I_F = 180 \text{ mA}, t_{PW} = 100 \mu\text{sec}$	V_F	15.9 Volts
Typical Thermal Resistance (junction to oil)	In dielectric oil	$R\theta_{JOIL}$	62 °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	$I_F=40\text{mA}; I_R=-100\text{mA}; I_{RR}=-20\text{mA}$	T_{RR}	80 ηs
Maximum Reverse Energy Withstand	-	E_{RSW}	500 mJ
Typical Junction Capacitance	$f = 1\text{Mhz}, V_r = 0\text{VDC}$	C_J	3 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	-	-	0.40
Body Diameter	D	-	-	0.12
Lead Length	l	1.0	25.4	-
Lead Diameter	d	-	-	0.025



Forward Current vs. Typical Forward Voltage Drop XGF12

