

# XGF20

20KV, 80 mA  
Fast Recovery  
High Voltage Diode



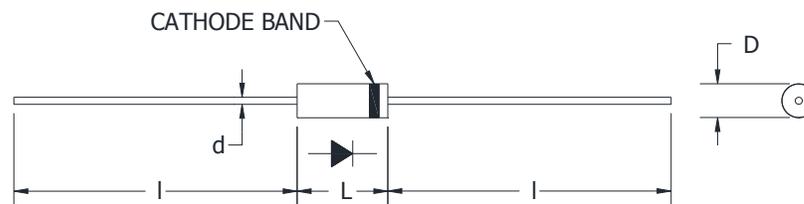
## Features

- 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	-	$V_{RRM}$	20,000 Volts
Average Forward Current Maximum	$T_{AIR} = 55^{\circ}C$	$I_{FAVM}$	80 mA
Average Forward Current Maximum	$T_{OIL} = 55^{\circ}C$	$I_{FAVM}$	160 mA
Maximum Forward Voltage Drop	$I_F = 160 \text{ mA}, t_{PW} = 100\mu\text{sec}$	$V_F$	28.6 Volts
Typical Thermal Resistance (junction to oil)	In dielectric oil	$R\theta_{JOIL}$	60 $^{\circ}C/W$
Maximum Surge Current Rating	8.3msec, half sine	$I_{FSM}$	15 Amps
Maximum Reverse Current	at rated $V_{RRM}$	$I_R$	0.2 $\mu A$
Maximum Reverse Recovery Time	$I_F=40\text{mA}; I_R=-100\text{mA}; I_{RR}=-20\text{mA}$	$T_{RR}$	80 ns
Maximum Reverse Energy Withstand	-	$E_{RSM}$	500 mJ
Typical Junction Capacitance	$f = 1\text{Mhz}, V_r = 0\text{VDC}$	$C_j$	2.3 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>	-	-	0.47	12
Body Diameter	<b>D</b>	-	-	0.12	3.0
Lead Length	<b>l</b>	1.0	25.4	-	-
Lead Diameter	<b>d</b>	-	-	0.025	0.6



**Forward Current vs. Typical Forward Voltage Drop**  
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