

# Spice Model

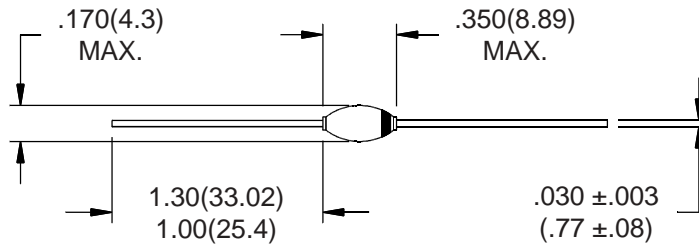


**X50FF3**



## Electrical Characteristics and Maximum Ratings

Part Number	Working Reverse Voltage (V <sub>rw</sub> )	Average Rectified Current (I <sub>o</sub> )		Reverse Current @ V <sub>rw</sub> (I <sub>r</sub> )		Forward Voltage (V <sub>f</sub> )		1 Cycle Surge Current t <sub>p</sub> =8.3ms (I <sub>fsm</sub> )	Repetitive Surge Current (I <sub>frm</sub> )	Reverse Recovery Time (3) (T <sub>rr</sub> )	Thermal Impedance θ <sub>J-L</sub>			Junction Cap. @ 50VDC @ 1kHz (C <sub>j</sub> )
		55°C(1)	100°C(2)	25°C	100°C	25°C		25°C	25°C	25°C	L=.000	L=.125	L=.250	25°C
	Volts	mAmps	mAmps	µA	µA	Volts	mA	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
X50FF3	5000	150	75	1.0	20	12.5	150	10.0	1.2	30	5	12	21.5	3



Name	Parameter	Value	Units
IS	Reverse leakage current	2.50E-07	Amps
N	Emission coefficient	38	
T	Temperature	25	C
RS	Diode series resistance	2.2	Ohm
TT	Transit time	30	nS
CJ0	Zero-bias junction capacitance	3.10	pF
VJ	Bulk junction potential	8.66	Volts
M	Grading coefficient	0.5	
EG	Energy-band gap	1.11	Volts
XTI	Temperature coefficient	3	
KF	Flicker-noise coefficient	0	
AF	Flicker-noise exponent	1	
FC	Coefficient for capacitance	0.5	
BV	Diode breakdown voltage	6000	Volts
IBV	Diode breakdown current	100	uAmps

Dimensions: In. (mm) \* All temperatures are ambient unless otherwise noted. \* Data subject to change without notice.



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