

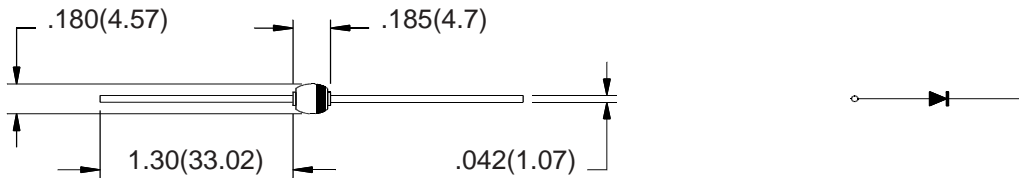
# Spice Model

1N5420



## 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	25°C	L=.125	L=.375	L=.500
	Volts	Amps	Amps	µA	µA	Volts	Amps	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
1N5420	600	5.00	2.00	1.0	20	1.5	9.00	80	15	400	9	20	25	35



Name	Parameter	Value	Units
I <sub>s</sub>	Reverse leakage current	5.00E-07	Amps
N	Emission coefficient	2.1	
T	Temperature	25	C
RS	Diode series resistance	0.025	Ohm
TT	Transit time	400	nS
C <sub>jo</sub>	Zero-bias junction capacitance	136.10	pF
VJ	Bulk junction potential	0.79	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	660	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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