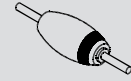


# Spice Model

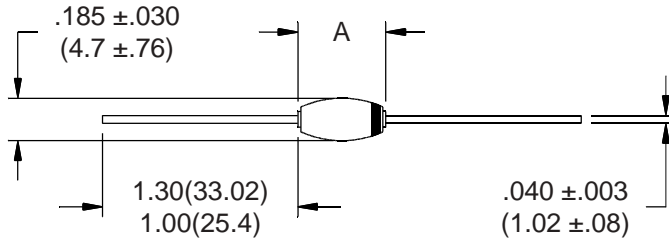


1N6513



## 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	
	Volts	Amps	Amps	μA	μA	Volts	Amps	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
1N6513	2000	2.0	1.50	1.0	25	3.5	2.0	100	15	70	3	6	12	25



Part	A
1N6513	.310(7.82) MAX. .250(7.6) MIN.
1N6515	.330(8.38) MAX. .270(6.85) MIN.
1N6517	.350(8.89) MAX. .290(7.37) MIN.
1N6519	.400(10.16) MAX. .340(8.64) MIN.

Name	Parameter	Value	Units
I <sub>s</sub>	Reverse leakage current	5.0E-07	Amps
N	Emission coefficient	7.2	
T	Temperature	25	C
RS	Diode series resistance	0.14	Ohm
TT	Transit time	70	nS
C <sub>jo</sub>	Zero-bias junction capacitance	56.64	pF
VJ	Bulk junction potential	1.67	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	2200	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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