High Voltage Diodes - Axial Lead

0.5A - 2.0A • 70ns • Hermetic • JANTX • JANTXV

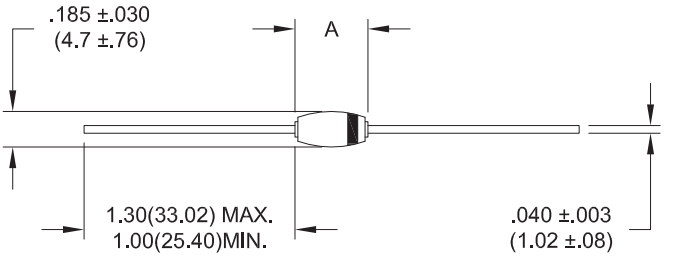
ELECTRICAL CHARACTERISTICS AND MAXIMUM RATINGS

Part Number	Working Reverse Voltage (Vrwm)	Average Rectified Current (Io)		Reverse Current @ Vrwm (Ir)		Forward Voltage (Vf)		1 Cycle Surge Current tp=8.3ms (Ifsm)	Repetitive Surge Current (Ifrm)	Reverse Recovery Time (3) (Trr)	Thermal Impedance θ_{J-L}			Junction Cap. @50VDC @ 1kHZ (Cj)
		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	Amps	Amps	µA	µA	Volts	Amps	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
1N6513	2000	2.00	1.50	1.0	25	3.5	2.00	100	15.00	70	3	6	12	25.0
1N6515	3000	1.50	1.00	1.0	25	6.0	1.50	60	10.00	70	3	6	12	20.0
1N6517	5000	1.00	0.50	1.0	25	8.0	1.00	40	8.00	70	3	6	12	16.0
1N6519	10000	0.50	0.25	1.0	25	13.0	0.50	25	5.00	70	3	6	12	8.0

(1)TL=55°C L=0.375" (2)TL=100°C L=0.375" (3)If=0.5A, Ir=1.0A, Irr=0.25A *Op. Temp.= -65°C to +175°C Stg. Temp.= -65°C to +200°C

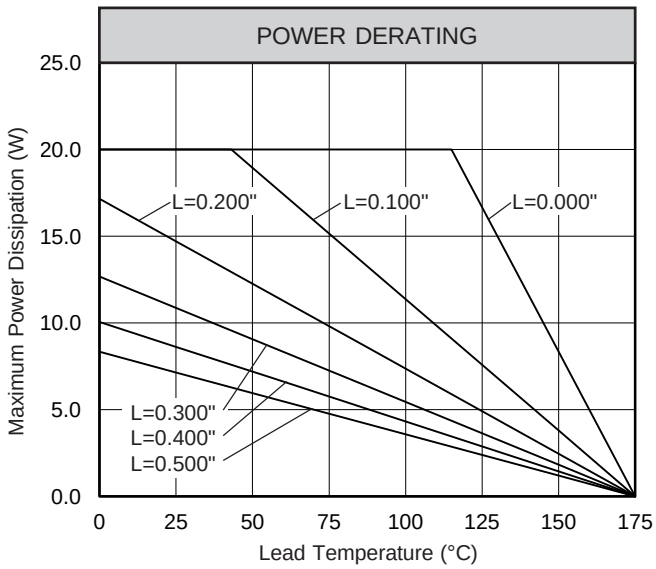


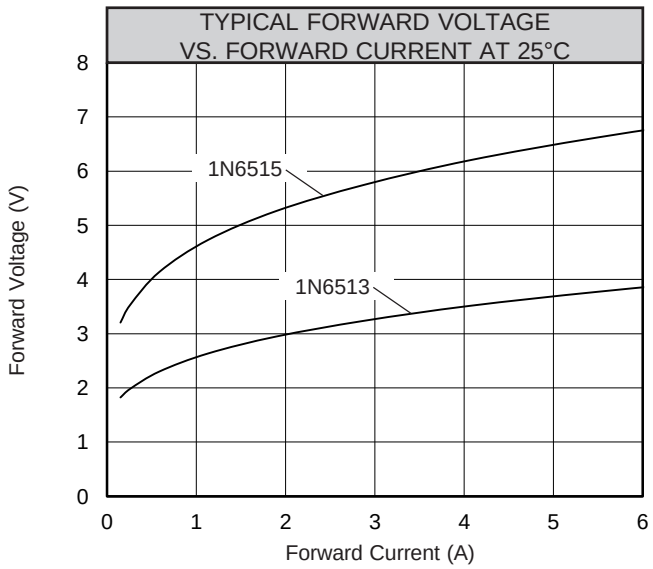
Part	A
1N6513	.310(7.82) MAX. .250(6.35) MIN.
1N6515	.330(8.38) MAX. .270(6.85) MIN.
1N6517	.350(8.89) MAX. .290(7.37) MIN.
1N6519	.400(10.16) MAX. .340(8.64) MIN.

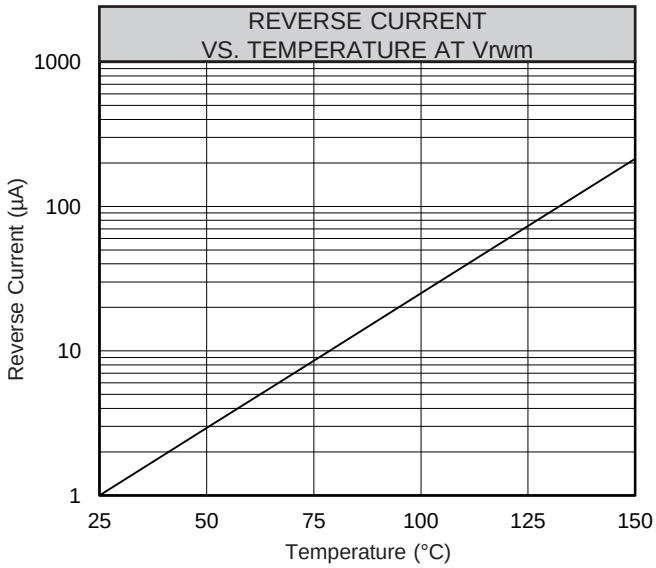


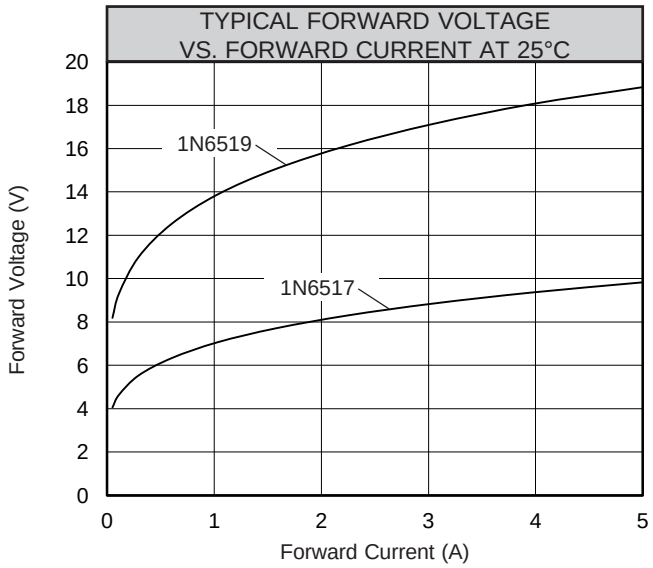
Dimensions: In. (mm) • All temperatures are ambient unless otherwise noted. • Data subject to change without notice.

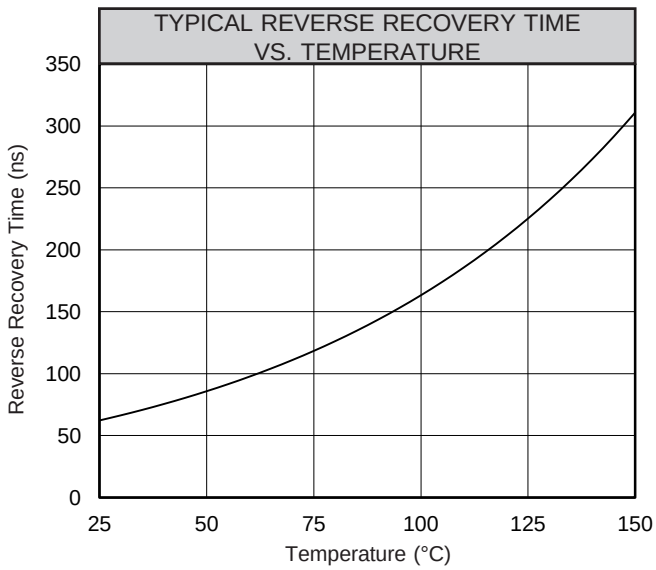
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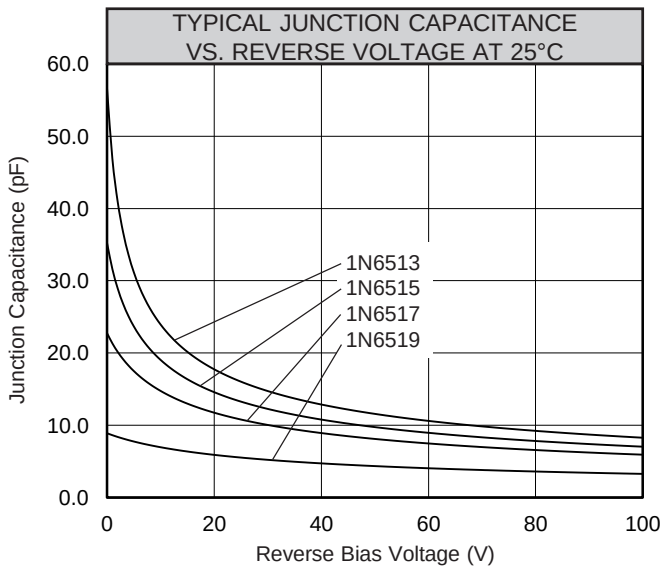

POWER DERATING
Maximum Power Dissipation (W)
25.0
20.0
15.0
10.0
5.0
0.0
L=0.200"
L=0.100"
L=0.000"
L=0.300"
L=0.400"
L=0.500"
0
25
50
75
100
125
150
175
Lead Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
8
7
6
5
4
3
2
1
0
1N6515
1N6513
0
1
2
3
4
5
6
Forward Current (A)


REVERSE CURRENT
VS. TEMPERATURE AT Vrwm
Reverse Current (µA)
1000
100
10
1
25
50
75
100
125
150
Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
20
18
16
14
12
10
8
6
4
2
0
1N6519
1N6517
0
1
2
3
4
5
Forward Current (A)


TYPICAL REVERSE RECOVERY TIME
VS. TEMPERATURE
Reverse Recovery Time (ns)
350
300
250
200
150
100
50
0
25
50
75
100
125
150
Temperature (°C)


TYPICAL JUNCTION CAPACITANCE
VS. REVERSE VOLTAGE AT 25°C
Junction Capacitance (pF)
60.0
50.0
40.0
30.0
20.0
10.0
0.0
1N6513
1N6515
1N6517
1N6519
0
20
40
60
80
100
Reverse Bias Voltage (V)