High Voltage Diodes - Axial Lead

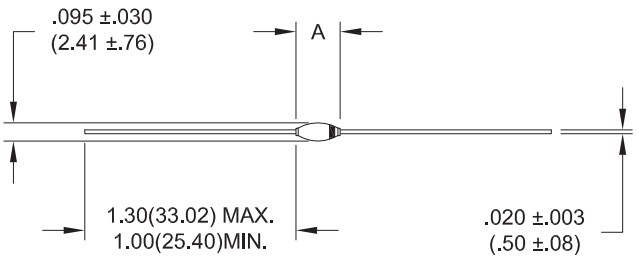
25mA - 250mA • 70ns • Hermetic • JANTX • JANTXV

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	mA	mA	µA	µA	Volts	mA	Amps	Amps	ns	°C/W	°C/W	°C/W	pF
1N6529	2000	250	125	0.1	10	3.0	25	10	1.50	70	18	30	50	4.0
1N6531	3000	100	50	0.1	10	7.0	25	8	1.25	70	18	30	50	2.0
1N6533	5000	50	25	0.1	10	9.0	25	4	0.75	70	18	30	50	1.0
1N6535	10000	25	12	0.1	10	14.0	25	2	0.38	70	18	30	50	0.5

(1)TL=55°C L=0.375" (2)TL=100°C L=0.375" (3)If=12.5mA, Ir=25mA, Irr=6.25mA *Op.Temp.= -65°C to +175°C Stg.Temp.= -65°C to +200°C



Part	A
1N6529	.200(5.08) MAX. .140(3.56) MIN.
1N6531	.220(5.59) MAX. .160(4.06) MIN.
1N6533	.240(6.10) MAX. .180(4.57) MIN.
1N6535	.300(7.62) MAX. .240(6.10) MIN.



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

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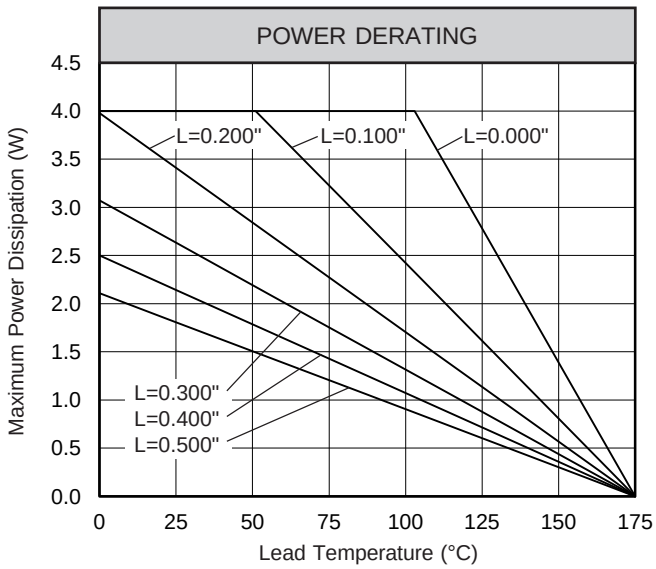
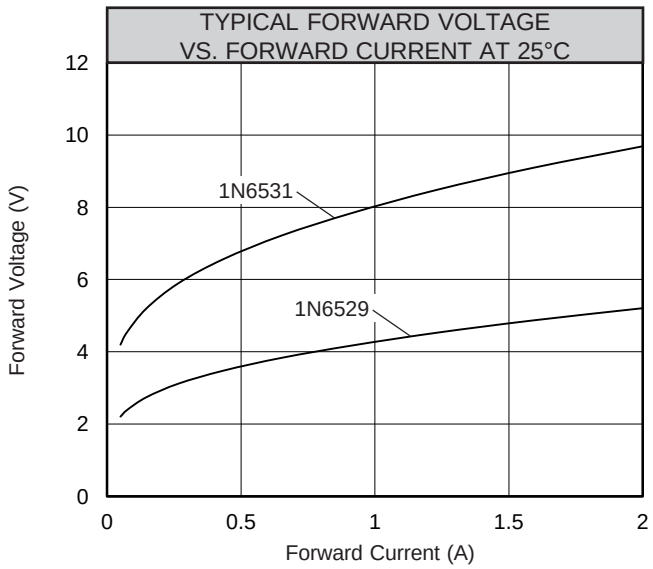
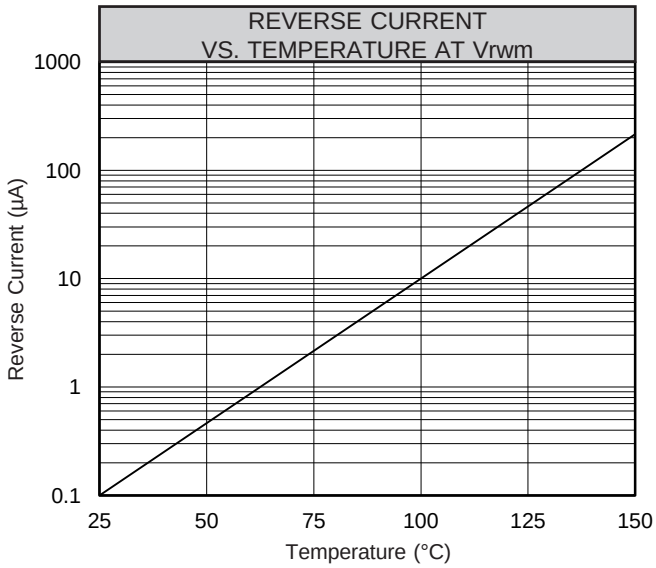
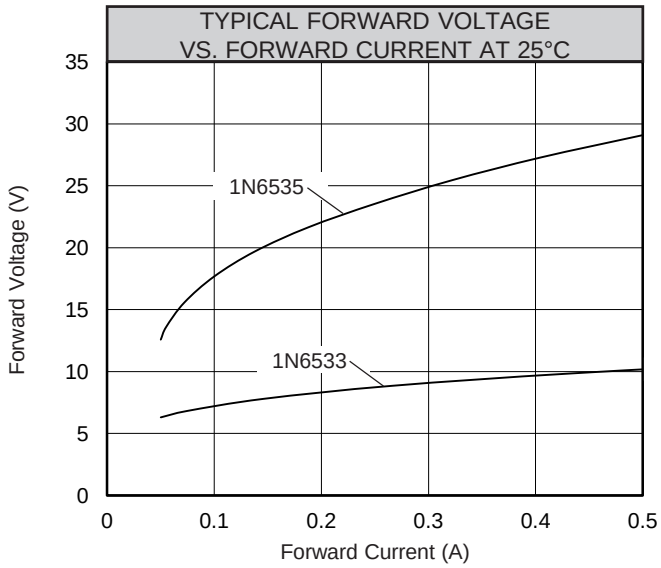
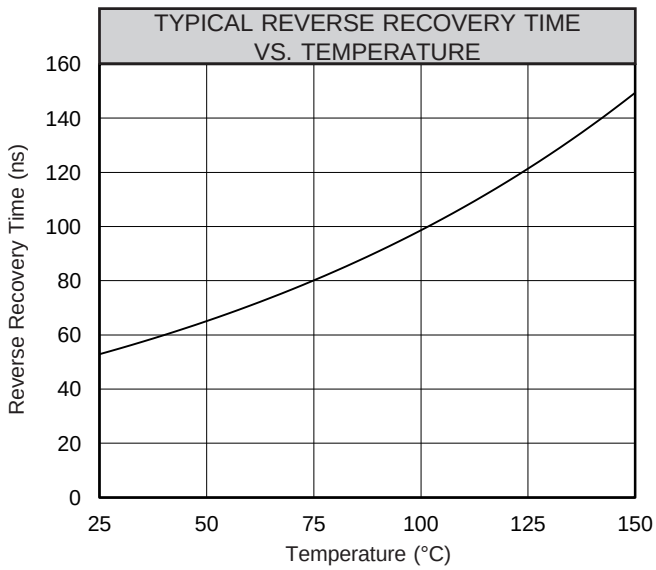
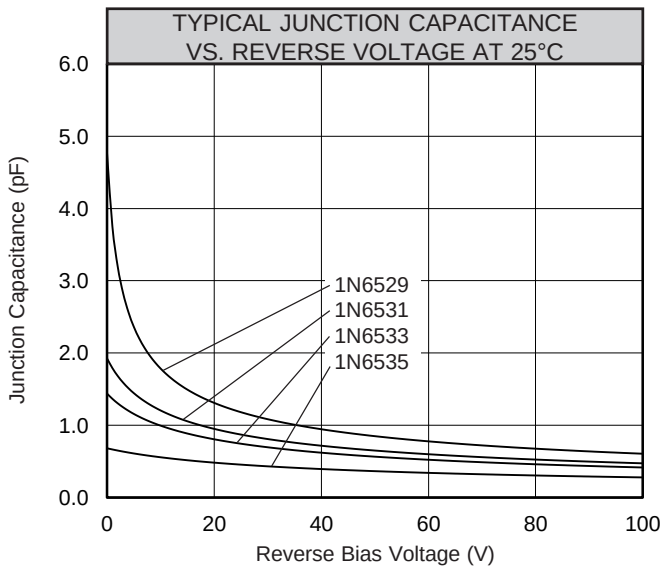

POWER DERATING
Maximum Power Dissipation (W)
4.5
4.0
3.5
3.0
2.5
2.0
1.5
1.0
0.5
0.0
L=0.200"
L=0.100"
L=0.000"
L=0.300"
L=0.400"
L=0.500"
0
25
50
75
100
125
150
175
Lead Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
12
10
8
6
4
2
0
1N6531
1N6529
0
0.5
1
1.5
2
Forward Current (A)


REVERSE CURRENT
VS. TEMPERATURE AT Vrwm
Reverse Current (µA)
1000
100
10
1
0.1
25
50
75
100
125
150
Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
35
30
25
20
15
10
5
0
1N6535
1N6533
0
0.1
0.2
0.3
0.4
0.5
Forward Current (A)


TYPICAL REVERSE RECOVERY TIME
VS. TEMPERATURE
Reverse Recovery Time (ns)
160
140
120
100
80
60
40
20
0
25
50
75
100
125
150
Temperature (°C)


TYPICAL JUNCTION CAPACITANCE
VS. REVERSE VOLTAGE AT 25°C
Junction Capacitance (pF)
6.0
5.0
4.0
3.0
2.0
1.0
0.0
1N6529
1N6531
1N6533
1N6535
0
20
40
60
80
100
Reverse Bias Voltage (V)