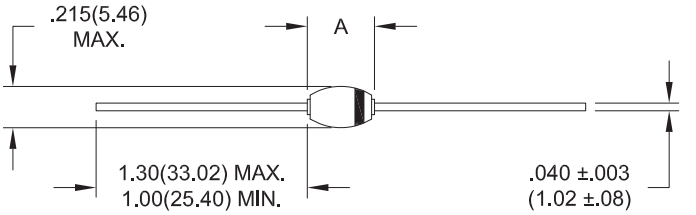
High Voltage Diodes - Axial Lead

500mA - 1500mA • 30ns - 50ns • Hermetic

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
1N6837	5000	500	250	1.0	25	12.0	500	20.0	4.0	30	3	6	12	16.0
1N6838	2000	1500	1000	1.0	25	4.5	1500	60.0	10.0	50	3	6	12	20.0
1N6839	5000	600	500	1.0	25	10.0	600	30.0	6.0	50	3	6	12	16.0

(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
1N6837	.350(8.89) MAX.
1N6838	
1N6839	

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

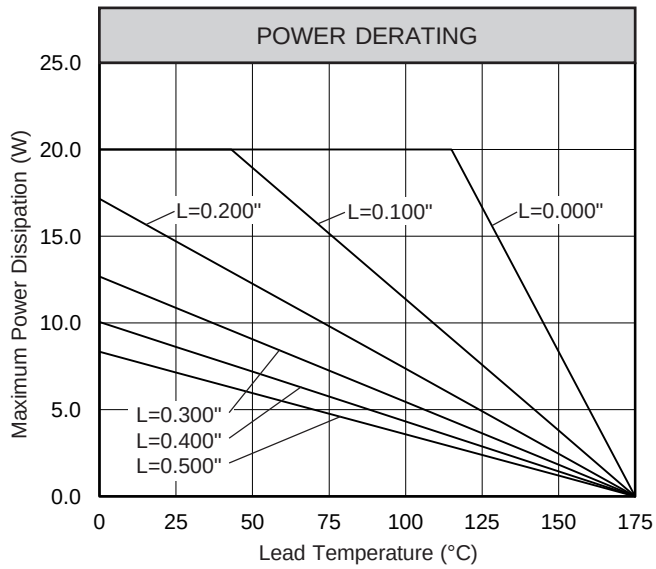
VOLTAGE MULTIPLIERS INC.

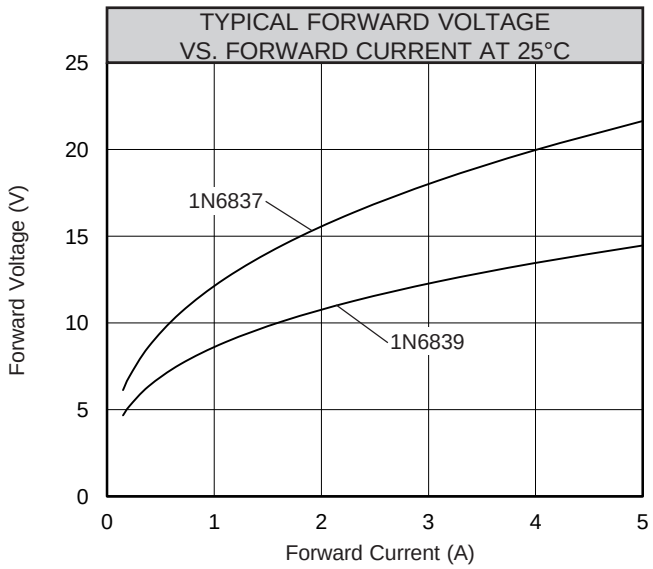
Voltage Multipliers Inc.

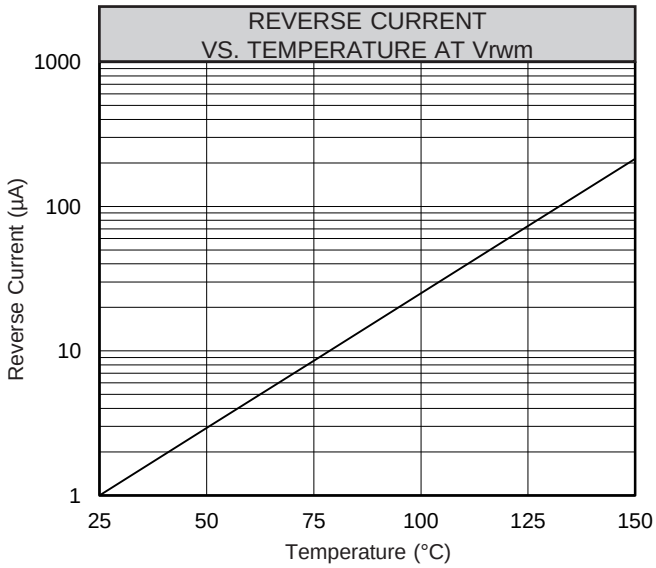
8711 W. Roosevelt Ave.
Visalia, CA 93291 USA

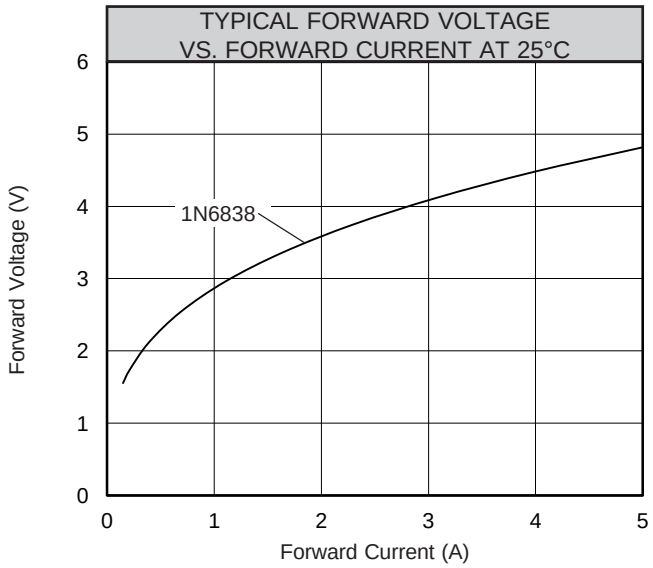
Tel: 559.651.1402
Fax: 559.651.0740

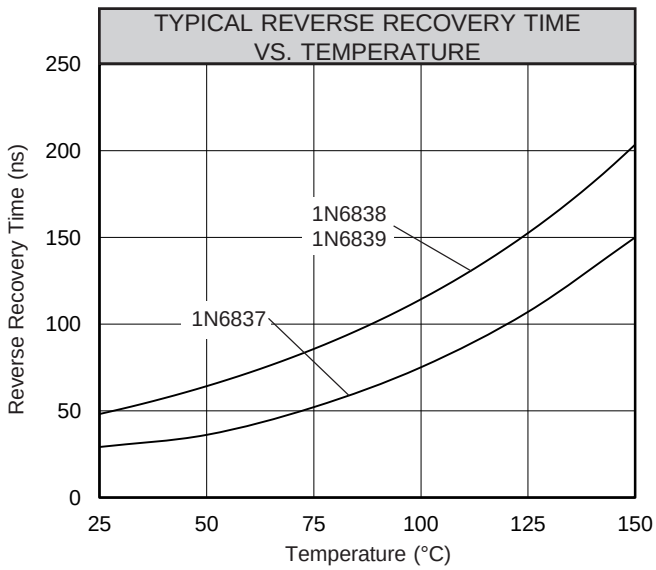
www.voltagemultipliers.com
www.highvoltagepowersupplies.com

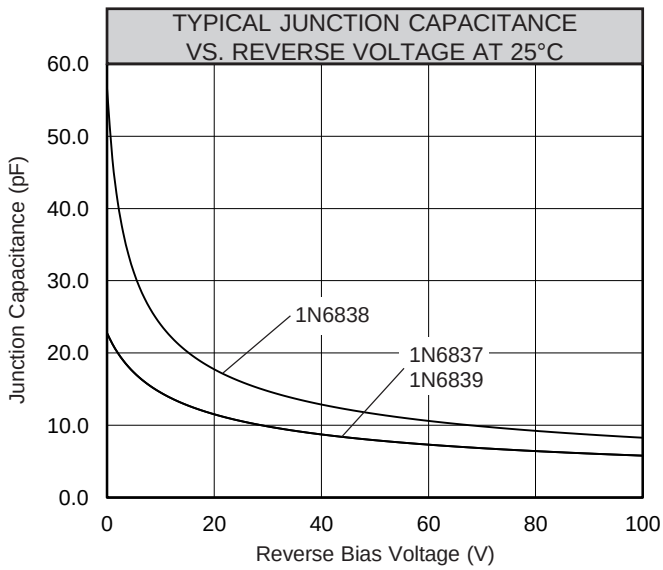

POWER DERATING
Maximum Power Dissipation (W)
25.0
20.0
15.0
10.0
5.0
0.0
L=0.200"
L=0.100"
L=0.000"
L=0.300"
L=0.400"
L=0.500"
0
25
50
75
100
125
150
175
Lead Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
25
20
15
10
5
0
1N6837
1N6839
0
1
2
3
4
5
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)
6
5
4
3
2
1
0
1N6838
0
1
2
3
4
5
Forward Current (A)


TYPICAL REVERSE RECOVERY TIME
VS. TEMPERATURE
Reverse Recovery Time (ns)
250
200
150
100
50
0
1N6838
1N6839
1N6837
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
1N6838
1N6837
1N6839
0
20
40
60
80
100
Reverse Bias Voltage (V)