High Voltage Diodes - Axial Lead

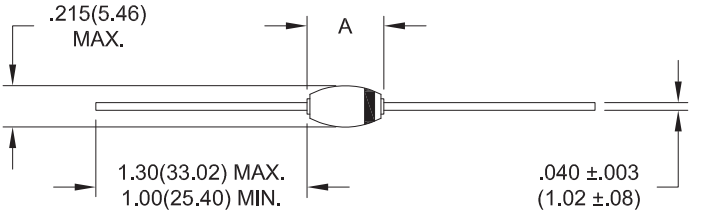
180mA - 1000mA • 30ns - 50ns • Hermetic

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
Z20FF3	2000	1000	750	1.0	25	6.0	750	65.0	10.0	30	3	6	12	20.0
Z50FF3	5000	360	180	1.0	25	12.5	360	20.0	4.0	30	3	6	12	16.0
Z100FF3	10000	180	90	1.0	25	25.0	180	10.0	2.0	30	3	6	12	8.0
Z20FF5	2000	1000	750	1.0	25	6.0	750	65.0	10.0	50	3	6	12	20.0
Z50FF5	5000	360	180	1.0	25	12.5	360	20.0	4.0	50	3	6	12	16.0
Z100FF5	10000	180	90	1.0	25	25.0	180	10.0	2.0	50	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
Z20FF(X) Z50FF(X)	.350(8.89) MAX.
Z100FF(X)	.400(10.16) MAX.

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

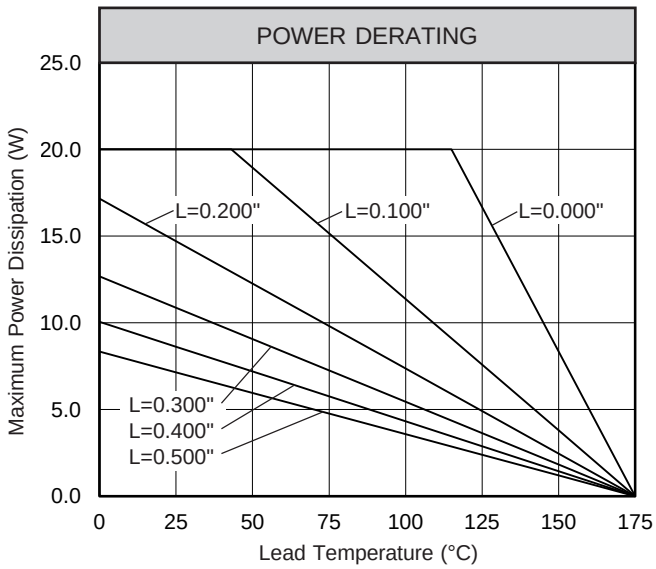
VOLTAGE MULTIPLIERS INC.

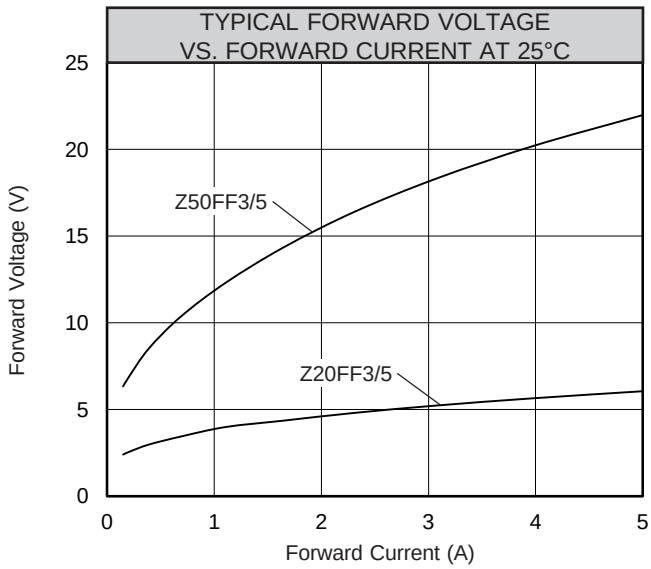
Voltage Multipliers Inc.

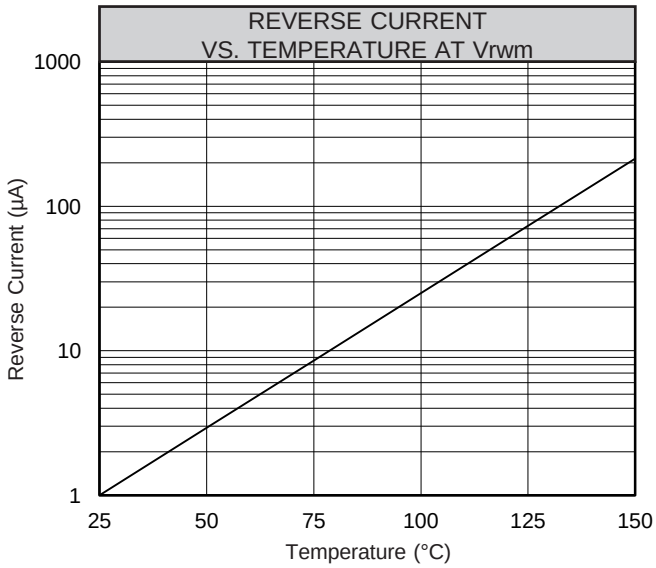
8711 W. Roosevelt Ave.
Visalia, CA 93291 USA

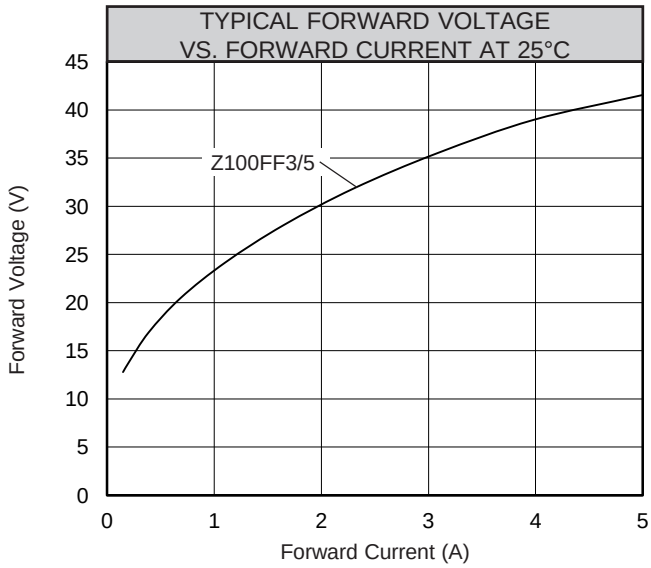
Tel: 559.651.1402
Fax: 559.651.0740

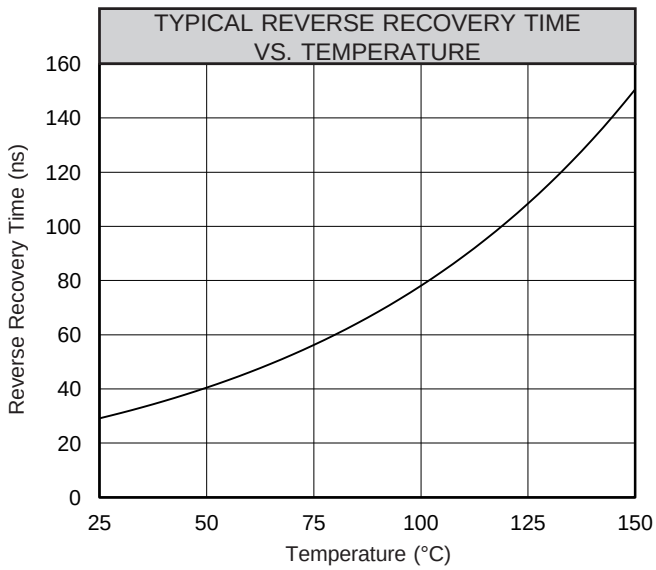
www.voltagemultipliers.com
www.highvoltagepowersupplies.com

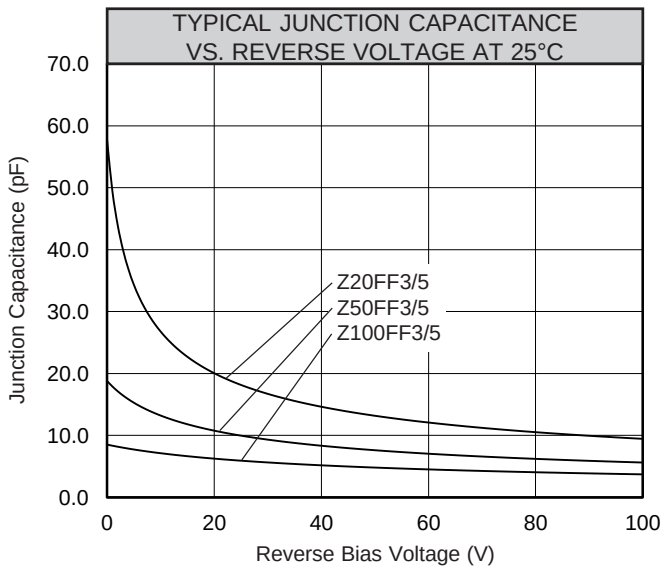

POWER DERATING
Maximum Power Dissipation (W)
25.0
20.0
15.0
10.0
5.0
0.0
L=0.200"
L=0.100"
L=0.000"
L=0.300"
L=0.400"
L=0.500"
0
25
50
75
100
125
150
175
Lead Temperature (°C)


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
25
20
15
10
5
0
Z50FF3/5
Z20FF3/5
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)
45
40
35
30
25
20
15
10
5
0
Z100FF3/5
0
1
2
3
4
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)
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
Z20FF3/5
Z50FF3/5
Z100FF3/5
0
20
40
60
80
100
Reverse Bias Voltage (V)