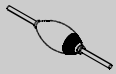
5,000 V - 16,000 V Rectifiers

10 mA - 40 mA Forward Current
30 ns - 50 ns Recovery Time

M50FF3 M50FF5
M100FF3 M100FF5
M160FF3 M160FF5

AXIAL LEADED
HERMETICALLY SEALED

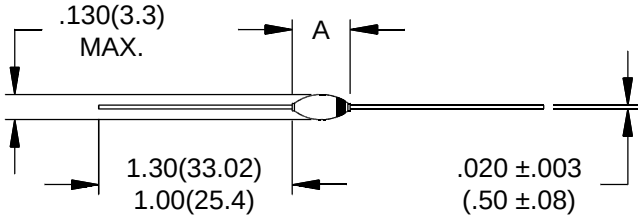


4

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
M50FF3	5000	40	20	0.1	10	12.5	40	2.0	0.4	30	18	30	50.0	1.0
M100FF3	10000	20	10	0.1	10	25.0	20	1.0	0.2	30	18	30	50.0	0.5
M160FF3	16000	10	5	0.1	10	50.0	10	0.5	0.1	30	33	45	65.0	0.5
M50FF5	5000	40	20	0.1	10	12.5	40	2.0	0.4	50	18	30	50.0	1.0
M100FF5	10000	20	10	0.1	10	25.0	20	1.0	0.2	50	18	30	50.0	0.5
M160FF5	16000	10	5	0.1	10	50.0	10	0.5	0.1	50	33	45	65.0	0.5

(1)TL=55°C L=0.375" (2)TL=100°C L=0.375" (3)If=12.5mA, Ir=25mA, Irr=6.3mA • Op.Temp.= -65°C to +175°C Stg.Temp.= -65°C to +200°C



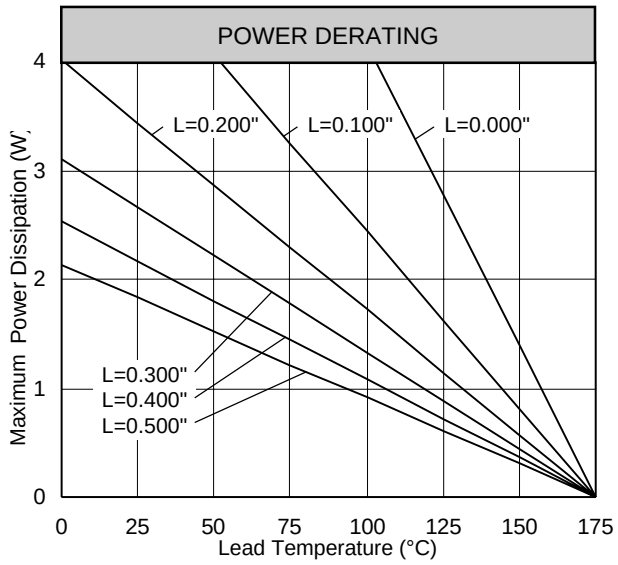
Part	A
M50FFX M100FFX	.300(7.62) MAX.
M160FFX	.350(8.89) MAX.

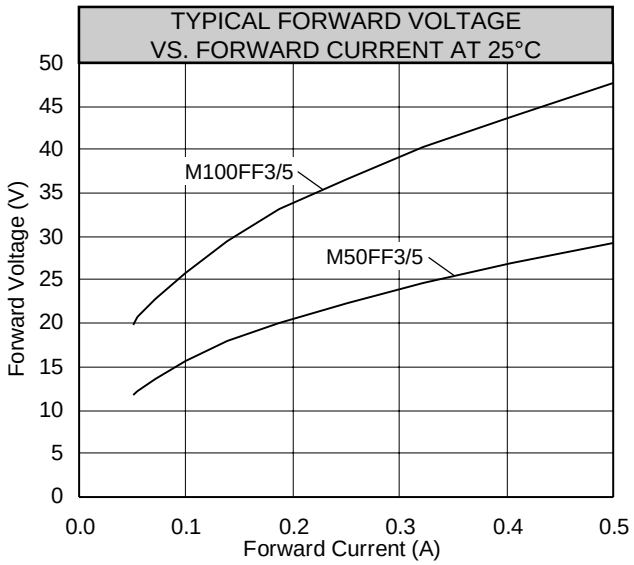


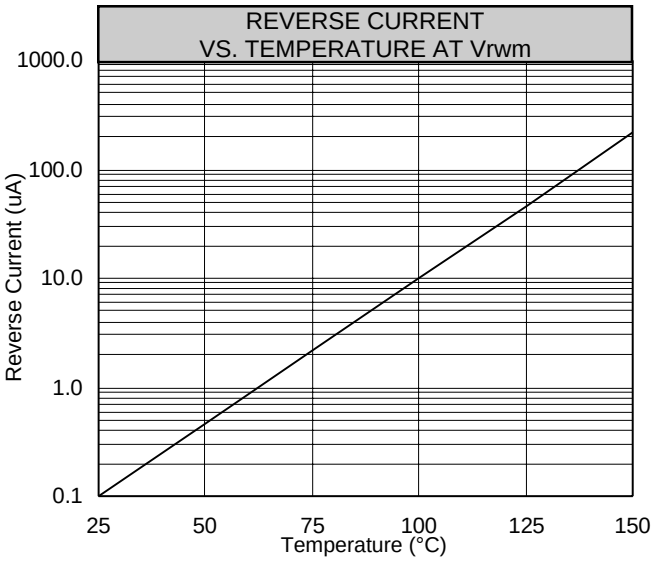
Dimensions: In. (mm) • All temperatures are ambient unless otherwise noted. • Data subject to change without notice.

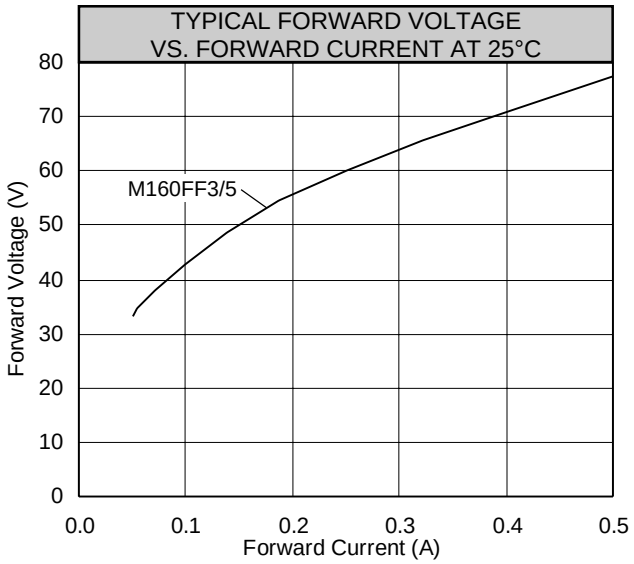
VOLTAGE MULTIPLIERS INC.
8711 W. Roosevelt Ave.
Visalia, CA 93291

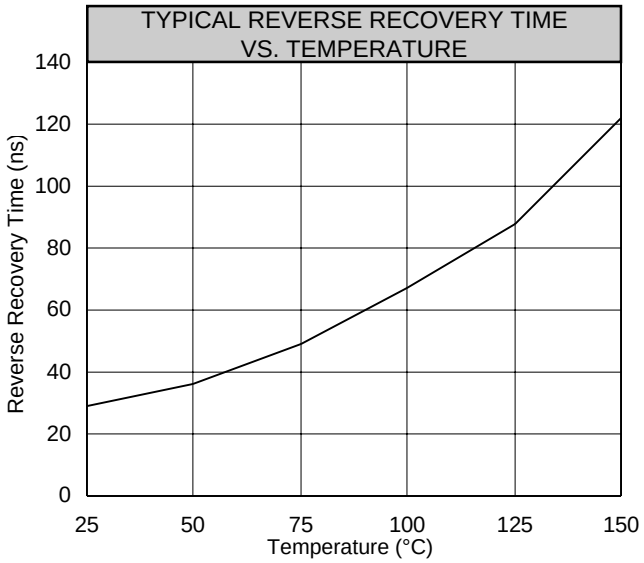
TEL 559-651-1402
FAX 559-651-0740
www.voltagemultipliers.com

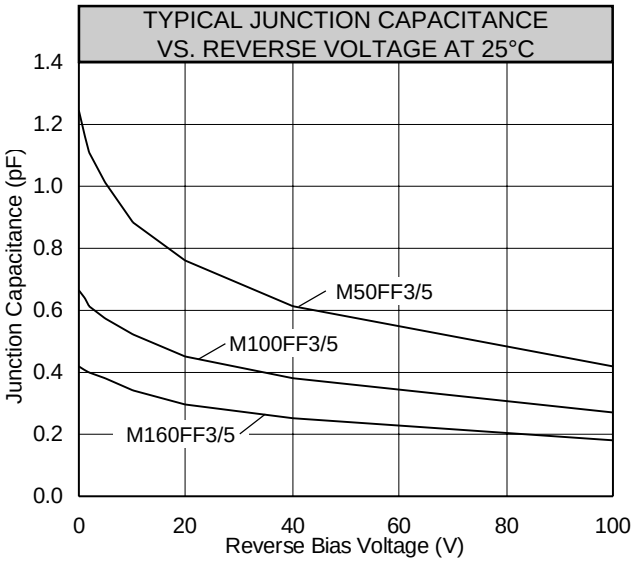

POWER DERATING
Maximum Power Dissipation (W)
Lead Temperature (°C)
L=0.200"
L=0.100"
L=0.000"
L=0.300"
L=0.400"
L=0.500"
0
1
2
3
4
0
25
50
75
100
125
150
175


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
Forward Current (A)
M100FF3/5
M50FF3/5
0
5
10
15
20
25
30
35
40
45
50
0.0
0.1
0.2
0.3
0.4
0.5


REVERSE CURRENT
VS. TEMPERATURE AT Vrwm
Reverse Current (uA)
Temperature (°C)
0.1
1.0
10.0
100.0
1000.0
25
50
75
100
125
150


TYPICAL FORWARD VOLTAGE
VS. FORWARD CURRENT AT 25°C
Forward Voltage (V)
Forward Current (A)
M160FF3/5
0
10
20
30
40
50
60
70
80
0.0
0.1
0.2
0.3
0.4
0.5


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


TYPICAL JUNCTION CAPACITANCE
VS. REVERSE VOLTAGE AT 25°C
Junction Capacitance (pF)
Reverse Bias Voltage (V)
M50FF3/5
M100FF3/5
M160FF3/5
0.0
0.2
0.4
0.6
0.8
1.0
1.2
1.4
0
20
40
60
80
100