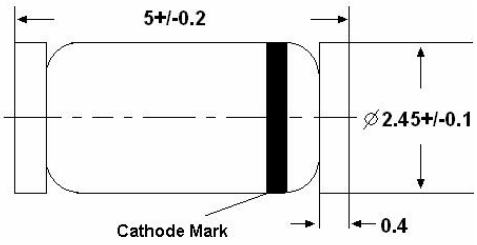
ZM3C

3 WATT ZENER DIODES

LL-41



Glass case MELF
Dimensions in mm

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Max. Steady State Power Dissipation	P_{tot}	3	W
Junction Temperature	T_j	175	°C
Storage Temperature Range	T_S	- 65 to + 175	°C

Characteristics at T_{amb} = 25 °C

Parameter	Symbol	Max.	Unit
Forward Voltage at I_F = 200 mA	V_F	1.5	V

Characteristics T_a = 25 °C unless otherwise noted.

Type	Zener Voltage				Zener Impedance [1]			Leakage Current		I_{ZM}
	V_Z (V)			at I_{ZT}	Z_{ZT} at I_{ZT}	Z_{ZK} at I_{ZK}		I_R at V_R		
	Min.	Nom.	Max.	mA	Ω Max.	Ω	mA	μA Max.	V	mA
ZM3C5V1	4.85	5.1	5.36	73.5	4	350	1	5	2	294
ZM3C5V6	5.32	5.6	5.88	66.9	2	250	1	5	3	267
ZM3C6V2	5.89	6.2	6.51	60.5	2	200	1	5	4	241
ZM3C6V8	6.46	6.8	7.14	55.1	2.5	200	1	5	5.2	220
ZM3C7V5	7.13	7.5	7.88	50	3	400	0.5	5	6	200
ZM3C8V2	7.79	8.2	8.61	45.7	3.5	400	0.5	5	6.5	182
ZM3C9V1	8.65	9.1	9.56	41.2	4	500	0.5	5	7	164
ZM3C10	9.5	10	10.5	37.5	4.5	500	0.25	5	8	150
ZM3C11	10.45	11	11.55	34.1	5.5	550	0.25	1	8.4	136
ZM3C12	11.4	12	12.6	31.2	6.5	550	0.25	1	9.1	125
ZM3C13	12.35	13	13.65	28.8	7	550	0.25	1	9.9	115
ZM3C15	14.25	15	15.75	25	9	600	0.25	1	11.4	100
ZM3C16	15.2	16	16.8	23.4	10	600	0.25	1	12.2	93
ZM3C18	17.1	18	18.9	20.8	12	650	0.25	1	13.7	83
ZM3C20	19	20	21	18.7	14	650	0.25	1	15.2	75
ZM3C22	20.9	22	23.1	17	17.5	650	0.25	1	16.7	68
ZM3C24	22.8	24	25.2	15.6	19	700	0.25	1	18.2	62
ZM3C27	25.65	27	28.35	13.9	23	700	0.25	1	20.6	55
ZM3C30	28.5	30	31.5	12.5	28	750	0.25	1	22.8	50
ZM3C33	31.35	33	34.65	11.4	33	800	0.25	1	25.1	45
ZM3C36	34.2	36	27.8	10.4	38	850	0.25	1	27.4	41
ZM3C39	37.05	39	40.95	9.6	45	900	0.25	1	29.7	38
ZM3C43	40.85	43	45.15	8.7	53	950	0.25	1	32.7	34
ZM3C47	44.65	47	49.35	8	67	1000	0.25	1	35.8	31
ZM3C51	48.45	51	53.55	7.3	70	1100	0.25	1	38.8	29
ZM3C56	53.2	56	58.8	6.7	86	1300	0.25	1	42.6	26
ZM3C62	58.9	62	65.1	6	100	1500	0.25	1	47.1	24
ZM3C68	64.6	68	71.4	5.5	120	1700	0.25	1	51.7	22
ZM3C75	71.25	75	78.75	5	140	2000	0.25	1	56	20
ZM3C82	77.9	82	86.1	4.6	160	2500	0.25	1	62.2	18
ZM3C91	86.45	91	95.55	4.1	200	3000	0.25	1	69.2	16
ZM3C100	95	100	105	3.7	250	3100	0.25	1	76	15

[1] Zener Impedance (Z_Z) Derivation
The zener impedance is derived from 60 seconds AC voltage, which results when an AC current having an rms value equal to 10% of the DC zener current (I_{ZT} or I_{ZK}) is superimposed on I_{ZT} or I_{ZK}.

[2] Tested with pulses tp = 20 ms.

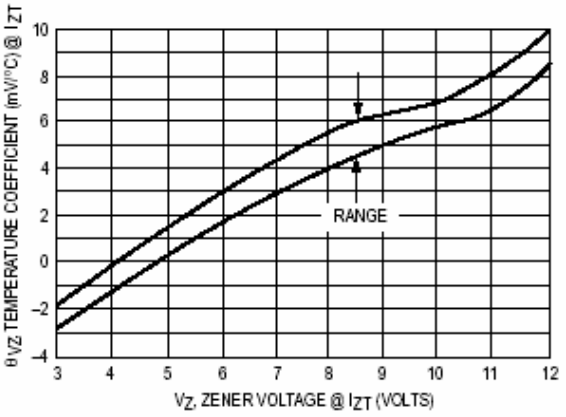


Figure 1 . Units To 12 Volts

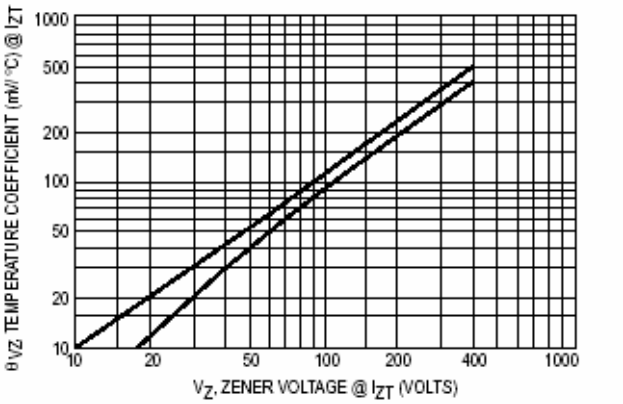


Figure 2 . Units 10 To 400 Volts

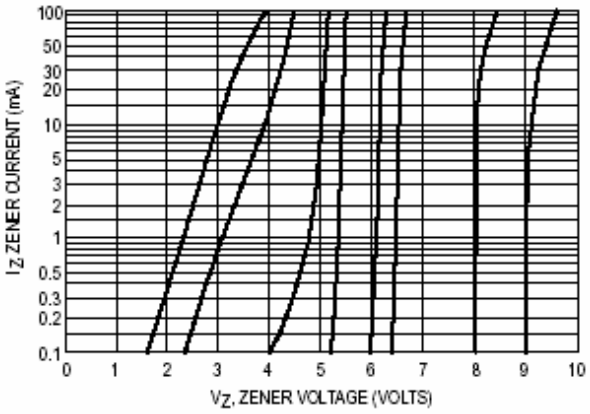


Figure 3 . VZ = 3.3 thru 10 Volts

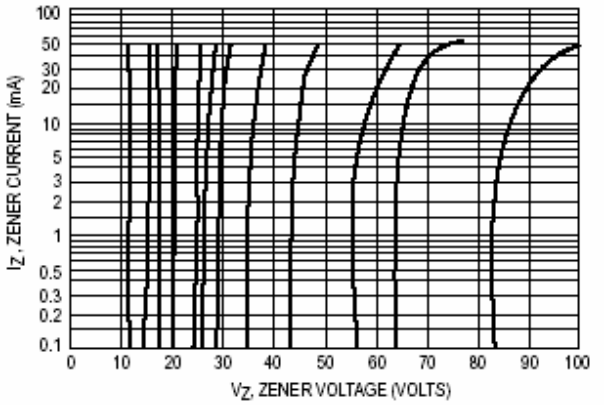


Figure 4 . VZ = 12 thru 82 Volts

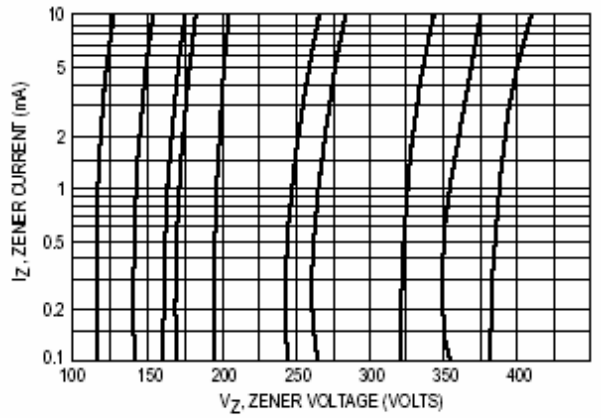


Figure 5 . VZ = 100 thru 400 Volts