Surface Mount Zener Diode

ZMM55C Series

RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

Electrical Characteristics (T_A = 25 ℃ unless otherwise specified) 500mW

Type Number	Zener Voltage Range (Note 2)				Maximum Zener Impedance (Note 3)			Maximum Reverse Current (Note 2)		Temperature Coefficient of Zener Voltage @ I_{ZT} = 5 mA mV / ℃	
	V_Z			@I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R @ V_R			
	Min	Nom	Max								
	V	V	V	mA	Ω	Ω	mA	μA	V	Min	Max
ZMM55C2V0	1.9	2.0	2.1	5	100	600	1.0	50	1.0	-3.5	0
ZMM55C2V2	2.1	2.2	2.3	5	100	600	1.0	50	1.0	-3.5	0
ZMM55C2V4	2.2	2.4	2.6	5	85	600	1.0	50	1.0	-3.5	0
ZMM55C2V7	2.5	2.7	2.9	5	85	600	1.0	10	1.0	-3.5	0
ZMM55C3V0	2.8	3.0	3.2	5	85	600	1.0	4	1.0	-3.5	0
ZMM55C3V3	3.1	3.3	3.5	5	85	600	1.0	2	1.0	-3.5	0
ZMM55C3V6	3.4	3.6	3.8	5	85	600	1.0	2	1.0	-3.5	0
ZMM55C3V9	3.7	3.9	4.1	5	85	600	1.0	2	1.0	-3.5	0
ZMM55C4V3	4.0	4.3	4.6	5	75	600	1.0	1	1.0	-3.5	0
ZMM55C4V7	4.4	4.7	5.0	5	60	600	1.0	0.5	1.0	-3.5	0.2
ZMM55C5V1	4.8	5.1	5.4	5	35	550	1.0	0.1	1.0	-2.7	1.2
ZMM55C5V6	5.2	5.6	6.0	5	25	450	1.0	0.1	1.0	-2.0	2.5
ZMM55C6V2	5.8	6.2	6.6	5	10	200	1.0	0.1	2.0	0.4	3.7
ZMM55C6V8	6.4	6.8	7.2	5	8	150	1.0	0.1	3.0	1.2	4.5
ZMM55C7V5	7.0	7.5	7.9	5	7	50	1.0	0.1	5.0	2.5	5.3
ZMM55C8V2	7.7	8.2	8.7	5	7	50	1.0	0.1	6.0	3.2	6.2
ZMM55C9V1	8.5	9.1	9.6	5	10	50	1.0	0.1	7.0	3.8	7.0
ZMM55C10	9.4	10	10.6	5	15	70	1.0	0.1	7.5	4.5	8.0
ZMM55C11	10.4	11	11.6	5	20	70	1.0	0.1	8.5	5.4	9.0
ZMM55C12	11.4	12	12.7	5	20	90	1.0	0.1	9.0	6.0	10.0
ZMM55C13	12.4	13	14.1	5	26	110	1.0	0.1	10	7.0	11.0
ZMM55C15	13.8	15	15.8	5	30	110	1.0	0.1	11	9.2	13.0
ZMM55C16	15.3	16	17.1	5	40	170	1.0	0.1	12	10.4	14.0
ZMM55C18	16.8	18	19.1	5	50	170	1.0	0.1	14	12.4	16.0
ZMM55C20	18.8	20	21.2	5	55	220	1.0	0.1	15	14.4	18.0
ZMM55C22	20.8	22	23.3	5	55	220	1.0	0.1	17	16.4	20.0
ZMM55C24	22.8	24	25.6	5	80	220	1.0	0.1	18	18.4	22.0
ZMM55C27	25.1	27	28.9	5	80	220	1.0	0.1	20	21.4	25.3
ZMM55C30	28	30	32.0	5	80	220	1.0	0.1	22	24.4	29.4
ZMM55C33	31	33	35.0	5	80	220	1.0	0.1	24	27.4	33.4
ZMM55C36	34	36	38.0	5	80	220	1.0	0.1	27	30.4	37.4
ZMM55C39	37	39	41.0	2.5	90	500	1.0	0.1	30	33.4	41.2
ZMM55C43	40	43	46.0	2.5	90	600	1.0	0.1	33	10.0	12.0
ZMM55C47	44	47	50.0	2.5	110	700	1.0	0.1	36	10.0	12.0
ZMM55C51	48	51	54.0	2.5	100	750	1.0	0.1	38	10.0	12.0
ZMM55C56	52	56	60.0	2.5	135	1000	1.0	0.1	42	10.0	12.0

Standard Voltage Tolerance is ± 5 % and :
Suffix “A” for ± 1 %
Suffix “B” for ± 2 %
Suffix “C” for ± 5 %
Suffix “D” for ± 20 %
Measured with Pulses Tp=40m Sec

Absolute Maximum Ratings

Items	Symbol	Value	Unit
Power Dissipation at Tamb=25°C	P_{TOT}	500 *	mW
Junction Temperature	T_J	175	°C
Storage Temperature Range	T_{STG}	-65 ~ +175	°C

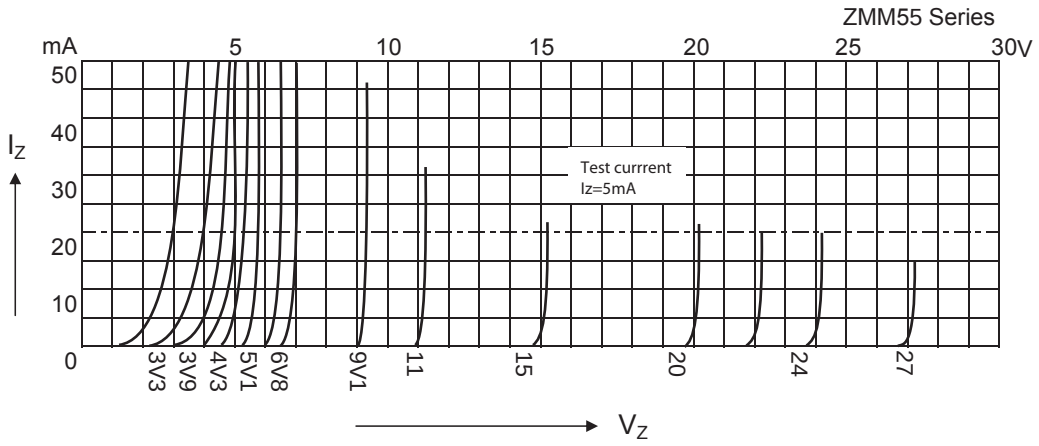
* Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

Characteristic at Tamb=25°C

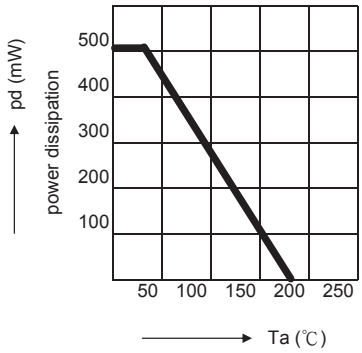
Items	Symbol	Min.	Typ.	Max.	Unit
Thermal Resistance Junctiobn to Ambient Air	RθJA	-	-	0.3 *	K / mW
Forward Voltage @ I_F=200mA	V_F	-	-	1.0	V

* Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

Breakdown Characteristics



Change in the power dissipation due to the ambient temperature.



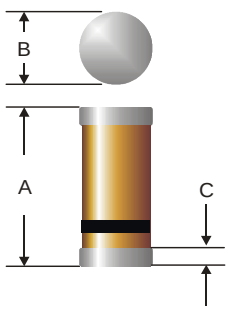
Ambient Temperature.

Mechanical Data

Items	Materials
Package	Mini MELF
Case	Hermeticall sealed glass
Lead Finish	Solder Plating

Packaging Dimensions (mm)		
Symbol	Min	Max
A	3.302	3.505
B	1.397	1.499
C	0.350	0.500

MINI MELF



Dimensions in mm