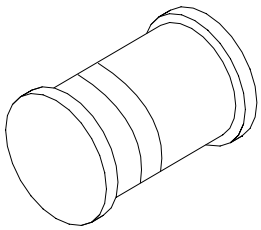
Surface Mount Zener Voltage Regulators

ZMM55CXXSM



Mini-Melf

Descriptions

This is a complete series of zener diodes with limits and excellent operating characteristics that reflect the the superior capabilities of silicon-oxide passivated junctions. It is designed for use in hybrid thick and thin film circuits.

Maximum Ratings

Characteristics	Symbol	Max	Unit
Total Device Dissipation @T_A=25℃	P_{tot}	500	mW
Storage Temperature	Tstg	-65 to +175	°C
Junction Temperature	Tj	175	°C

Electrical Characteristics (T_L=30℃, unless otherwise noted, V_F=1.0V Max @I_F=100mA for all types.)

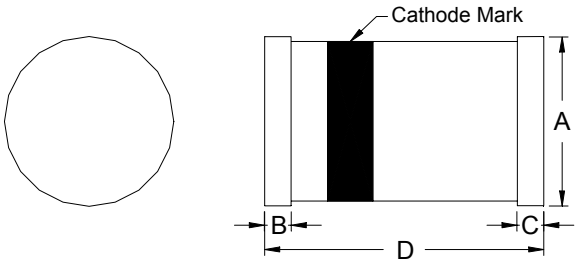
Device	Nominal Zener Voltage Vz at I_{ZT} (V)(Note1)	Test Current	Maximum Zener Impedance(Note 2)		Typical Temperature Coefficient (%/℃)	Maximum Reverse Leakage Current		Maximum Regulation Current I_{ZM}(mA) (Note 3)
		I_{ZT}(mA)	Z_{ZT} at I_{ZT} (Ω)	Z_{ZK} at I_{ZK}=1mA (Ω)		I_R (μA)	Test Voltage (V)	
ZMM55C2V4	2.28-2.56	5	85	600	-0.070	50	1.0	150
ZMM55C2V7	2.5-2.9	5	85	600	-0.070	10	1.0	135
ZMM55C3V0	2.8-3.2	5	85	600	-0.070	4	1.0	125
ZMM55C3V3	3.1-3.5	5	85	600	-0.065	2	1.0	115
ZMM55C3V6	3.4-3.8	5	85	600	-0.060	2	1.0	105
ZMM55C3V9	3.7-4.1	5	85	600	-0.050	2	1.0	95
ZMM55C4V3	4.0-4.6	5	75	600	-0.025	1	1.0	90
ZMM55C4V7	4.4-5.0	5	60	600	-0.010	0.5	1.0	85
ZMM55C5V1	4.8-5.4	5	35	550	+0.015	0.1	1.0	80
ZMM55C5V6	5.2-6.0	5	25	450	+0.025	0.1	1.0	70
ZMM55C6V2	5.8-6.6	5	10	200	+0.035	0.1	2.0	64
ZMM55C6V8	6.4-7.2	5	8	150	+0.045	0.1	3.0	58
ZMM55C7V5	7.0-7.9	5	7	50	+0.050	0.1	5.0	53
ZMM55C8V2	7.7-8.7	5	7	50	+0.050	0.1	6.0	47
ZMM55C9V1	8.5-9.6	5	10	50	+0.060	0.1	7.0	43
ZMM55C10	9.4-10.6	5	15	70	+0.070	0.1	7.5	40
ZMM55C11	10.4-11.6	5	20	70	+0.070	0.1	8.5	36
ZMM55C12	11.4-12.7	5	20	90	+0.070	0.1	9.0	32
ZMM55C13	12.4-14.1	5	26	110	+0.070	0.1	10	29
ZMM55C15	13.8-15.6	5	30	110	+0.070	0.1	11	27
ZMM55C16	15.3-17.1	5	40	170	+0.070	0.1	12	24
ZMM55C18	16.8-19.1	5	50	170	+0.070	0.1	14	21
ZMM55C20	18.8-21.2	5	55	220	+0.070	0.1	15	20
ZMM55C22	20.8-23.3	5	55	220	+0.070	0.1	17	18
ZMM55C24	22.8-25.6	5	80	220	+0.080	0.1	18	16
ZMM55C27	25.1-28.9	5	80	220	+0.080	0.1	20	14
ZMM55C30	28-32	5	80	220	+0.080	0.1	22	13
ZMM55C33	31-35	5	80	220	+0.080	0.1	24	12
ZMM55C36	34-38	5	80	220	+0.080	0.1	27	11
ZMM55C39	37-41	2.5	90	500	+0.080	0.1	30	10
ZMM55C43	40-46	2.5	90	600	+0.080	0.1	33	9.2
ZMM55C47	44-50	2.5	110	700	+0.080	0.1	36	8.5

Note: 1.The type numbers listed have zener voltage min/max as shown. Device tolerance of ±2% are indicated by a "B" instead of a "C". Zener voltage is measured with the device junction in thermal equilibrium at the lead temperature of 30℃±1℃.

2.Z_{ZT} and Z_{ZK} are measured by dividing the ac voltage drop across the device by the ac current applied. The specified limits are for $I_{Z(ac)}$=0.1$I_{Z(dc)}$ with the ac frequency = 1k Hz.

3.This data was calculated using nominal voltages. The maximum current handling capability on a worse case basis is limited by the actual zener voltage at the operating point and the powered derating curve.

Mini- Melf (SOD-80C) Dimension



LL-34
Mini-Melf
SOD-80C
CYStek package code:SM

*:Typical

DIM	Inches		Millimeters		DIM	Inches		Millimeters	
	Min.	Max.	Min.	Max.		Min.	Max.	Min.	Max.
A	0.0512	0.0591	1.30	1.50	C	0.0118	0.0197	0.30	0.50
B	0.0118	0.0197	0.30	0.50	D	0.1260	0.1417	3.2	3.6

Notes : 1.Controlling dimension : millimeters.
2.Maximum lead thickness includes lead finish thickness, and minimum lead thickness is the minimum thickness of base material.
3.If there is any question with packing specification or packing method, please contact your local CYStek sales office.