

**FEATURES**

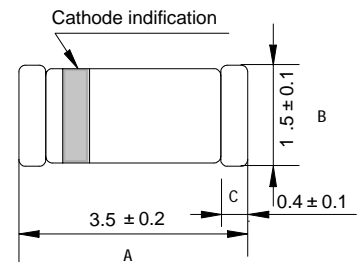
- Low zener impedance
- Low regulation factor
- Glass passivated junction
- High temperature soldering guaranteed  
260°C/10S at terminals



LL34 (SOD-80)

**MECHANICAL DATA**

- Case: MINI MELF molded glass body
- Terminals: Plated axial leads, solderable per MIL-STD 750, method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.04 grams (approx.)



Dimensions in millimeters

**Maximum Ratings (TA=25 °C unless otherwise noted)**

Characteristic	Symbol	Value	Unit
Power Dissipation at Tamb=25 C(Note 1)	$P_{tot}$	500	mW
Forward voltage at IF=100mA	$V_F$	1.0	V
Junction Temperature	$T_j$	200	°C
Storage Temperature Range	$T_{STG}$	-65 to + 200	°C
Thermal resistance junction ambient(Note 1)	$R_{qJA}$	0.3	K/mW

Note 1: Valid provided that leads at a distance of 10mm from case are kept at ambient temperature

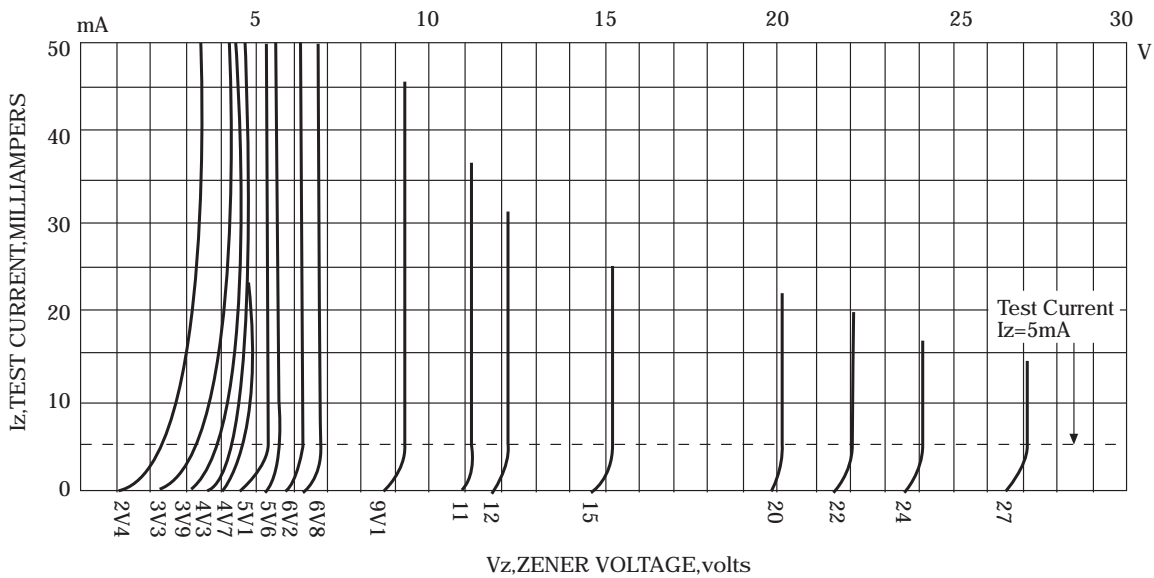
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

Device Type	Nominal Zener Voltage V <sub>Z</sub> @I <sub>ZT</sub>		Test Current I <sub>ZT</sub>	Maximum Zener Impedance			Maximum Reverse Leakage Current		Typical Temperature Coefficient	Maximum Regulator Current I <sub>ZM</sub>
				Z <sub>ZT</sub> @I <sub>ZT</sub>	Z <sub>Zk</sub> @I <sub>ZK</sub>	I <sub>ZK</sub>	I <sub>R</sub>	@V <sub>R</sub>		
	Min	Max	mA	Ohms	Ohms	mA	μA	Volts	(%/°C)	mA
ZMM2V0	1.90	2.10	5	100	600	1	150	1	-0.085	165
ZMM2V2	2.09	2.31	5	100	600	1	150	1	-0.085	165
ZMM2V4	2.28	2.56	5	85	600	1	50	1	-0.085	155
ZMM2V7	2.5	2.9	5	85	600	1	10	1	-0.08	135
ZMM3V0	2.8	3.2	5	85	600	1	4	1	-0.075	125
ZMM3V3	3.1	3.5	5	85	600	1	2	1	-0.07	115
ZMM3V6	3.4	3.8	5	85	600	1	2	1	-0.065	105
ZMM3V9	3.7	4.1	5	85	600	1	2	1	-0.06	95
ZMM4V3	4	4.6	5	75	600	1	1	1	0.055	90
ZMM4V7	4.4	5	5	60	600	1	0.5	1	0.03	85
ZMM5V1	4.8	5.4	5	35	550	1	0.1	1	0.03	80
ZMM5V6	5.2	6	5	25	450	1	0.1	1	0.038	70
ZMM6V2	5.8	6.6	5	10	200	1	0.1	2	0.045	64
ZMM6V8	6.4	7.2	5	8	150	1	0.1	3	0.05	58
ZMM7V5	7	7.9	5	7	50	1	0.1	5	0.058	53
ZMM8V2	7.7	8.7	5	7	50	1	0.1	6.2	0.062	74
ZMM9V1	8.5	9.6	5	10	50	1	0.1	6.8	0.068	43
ZMM10	9.4	10.6	5	15	70	1	0.1	7.5	0.075	40
ZMM11	10.4	11.6	5	20	70	1	0.1	8.2	0.076	36
ZMM12	11.4	12.7	5	20	90	1	0.1	9.1	0.077	32
ZMM13	12.4	14.1	5	26	110	1	0.1	10	0.079	29
ZMM15	13.8	15.6	5	30	110	1	0.1	11	0.082	27
ZMM16	15.3	17.1	5	40	170	1	0.1	12	0.083	24
ZMM18	16.8	19.1	5	50	170	1	0.1	13	0.085	21
ZMM20	18.8	21.2	5	55	220	1	0.1	15	0.086	20
ZMM22	20.8	23.3	5	55	220	1	0.1	16	0.087	18
ZMM24	22.8	25.6	5	80	220	1	0.1	18	0.088	16
ZMM27	25.1	28.9	5	80	220	1	0.1	20	0.09	14
ZMM30	28	32	5	80	220	1	0.1	22	0.091	13
ZMM33	31	35	5	80	220	1	0.1	24	0.092	12
ZMM36	34	38	5	80	220	1	0.1	27	0.093	11
ZMM39	37	41	2.5	90	500	0.5	0.1	30	0.094	10
ZMM43	40	46	2.5	90	600	0.5	0.1	33	0.095	9.2
ZMM47	44	50	2.5	110	700	0.5	0.1	36	0.095	8.5
ZMM51	48	54	2.5	125	700	0.5	0.1	39	0.096	7.8
ZMM56	52	60	2.5	135	1000	0.5	0.1	43	0.096	7

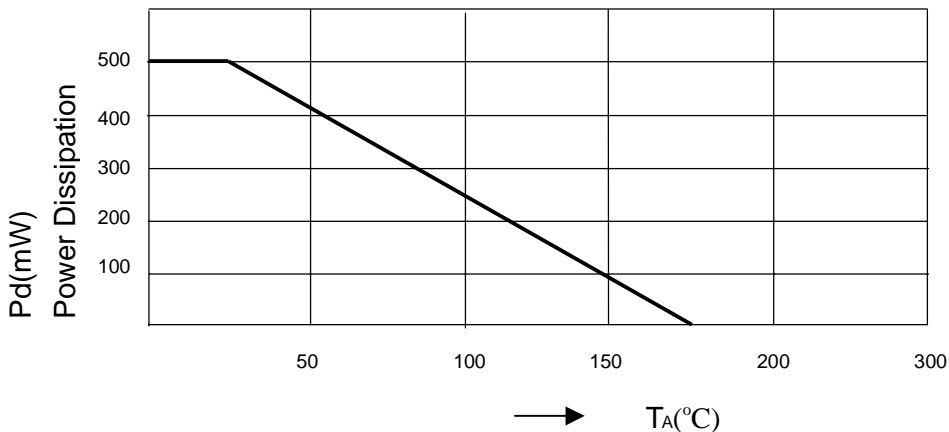
**ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified**

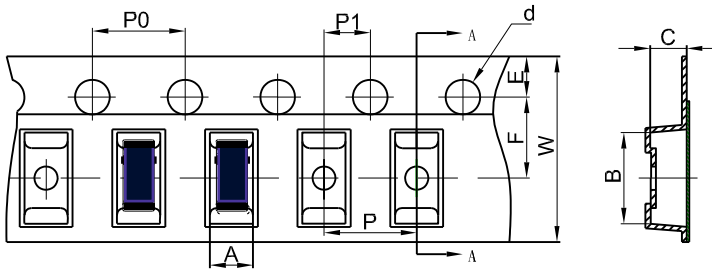
ZMM62	58	66	2.5	150	1000	0.5	0.1	47	0.096	6.4
ZMM68	64	72	2.5	200	1000	0.5	0.1	51	0.096	5.9
ZMM75	70	80	2.5	250	1500	0.5	0.1	56	0.096	5.3
ZMM82	77	87	2.5	300	2000	0.5	0.1	62	0.096	4.8
ZMM91	85	96	1	450	5000	0.1	0.1	68	0.096	4.4
ZMM100	94	106	1	450	5000	0.1	0.1	75	0.096	4.0
ZMM110	104	116	1.0	600	5000	0.1	0.1	82	+0.096	3.6
ZMM120	114	127	1.0	800	5000	0.1	0.1	91	+0.096	3.3
ZMM130	124	141	1.0	1000	5000	0.1	0.1	100	+0.096	3.0
ZMM150	138	156	1.0	1200	5000	0.1	0.1	110	+0.096	2.6

**Typical Characteristics**

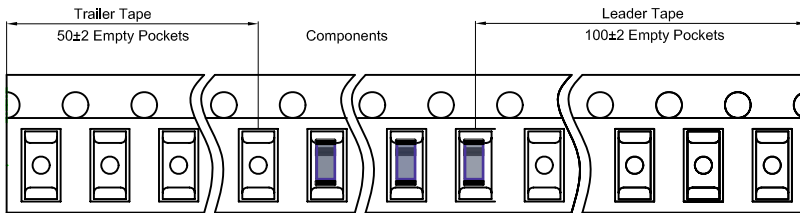
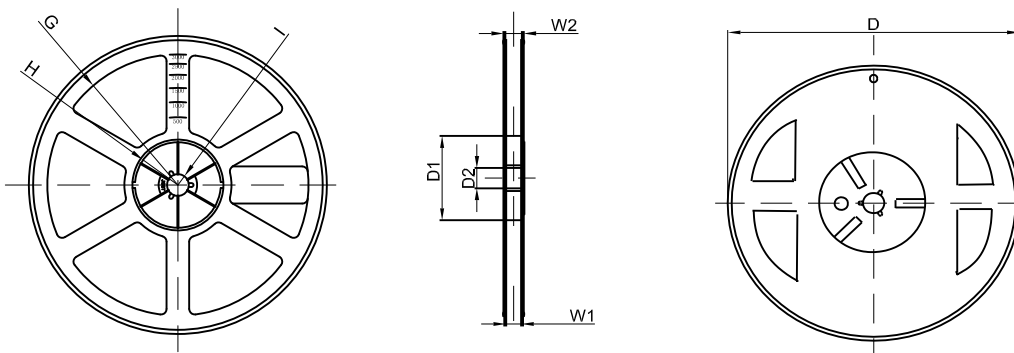


**POWER , TEMPERATURE DERATING CURVE**



**LL34 Embossed Carrier Tape**


DIMENSIONS ARE IN MILLIMETER										
TYPE	A	B	C	d	E	F	P0	P	P1	W
LL34	1.6	3.9	1.6	φ 1.50	1.75	3.50	4.00	4.00	2.00	8.0
TOLERANCE	±0.05	±0.05	±0.05	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1	±0.1

**LL34 Tape Leader and Trailer**

**LL34 Reel**


DIMENSIONS ARE IN MILLIMETER										
REEL OPTION	D	D1	D2	G	H	I	W1	W2		
7" DIA	φ 178	54.40	13.00	R78	R25.60	R6.50	9.50	12.30		
TOLERANCE	±2	±1	±1	±1	±1	±1	±1	±1		