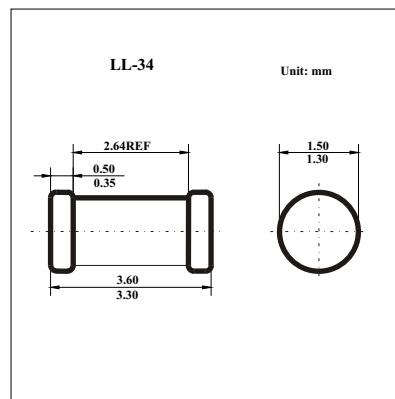


## KMM1 THRU KMM75

### ■ Features

- Silicon planar zener diodes
- In miniMELE case especially for automatic insertion
- The zener voltages are graded according to the international E 24 standard . Offered with either 5% or 2% tolerance. Smaller voltage tolerance and other zener voltages are available upon request.



### ■ Absolute Maximum Ratings Ta = 25°C

Parameter	Symbol	Rating	Unit
Power dissipation (Note 1)	P <sub>D</sub>	500	mW
Thermal resistance junction to ambient air (Note 1)	R <sub>θJA</sub>	300	°C/W
Junction temperature	T <sub>J</sub>	175	°C
Storage temperature range	T <sub>stg</sub>	-55 to +175	°C

Notes: 1. Valid provided that Electrodes are kept at Ambient Temperature.



## KMM1 THRU KMM75

■ Electrical characteristics (TA=25°C unless otherwise noted)

Type 2% tol.	Dynamic Resistance		Temp. Coefficient of Zener Voltage at IZ= 5 mA		Maximum Reverse Leakage Current		Admissible Zener Current <sup>(2)</sup>	
	at IZ= 5 mA	at IZ= 1 mA	$\alpha_{VZ} (10^{-4}/^{\circ}\text{C})$		IR ( $\mu\text{A}$ )	at VR (V)	at	at
	f= 1 kHz r <sub>zj</sub> ( $\Omega$ )	f= 1 kHz r <sub>zj</sub> ( $\Omega$ )	min.	max.			Tamb=45 °C Iz (mA)	Tamb=25 °C Iz (mA)
KMM1 <sup>(3)</sup>	6.5(<8)	<50	-26	-23			280	340
KMM2.4	<100	<600	-10	-5	50	0.8	152	175
KMM2.7	75(<83)	<500	-9	-4	20	0.8	135	160
KMM3	80(<95)	<500	-9	-3	20	0.8	117	140
KMM3.3	80(<95)	<500	-8	-3	6	0.8	109	130
KMM3.6	80(<95)	<500	-8	-3	6	0.8	11	120
KMM3.9	80(<95)	<500	-7	-3	1.6	0.8	92	110
KMM4.3	80(<95)	<500	-6	-1	1.0	0.8	85	100
KMM4.7	70(<78)	<500	-5	+2	0.1	0.8	76	90
KMM5.1	30(<60)	<480	-3	+4	0.1	0.8	67	80
KMM5.6	10(<40)	<400	-2	+6	0.1	1	59	70
KMM6.2	4.8(<10)	<200	-1	+7	0.1	2	54	64
KMM6.8	4.5(<8)	<150	+2	+7	0.1	3	49	58
KMM7.5	4(<7)	<50	+3	+7	0.1	5	44	53
KMM8.2	4.5(<7)	<50	+4	+7	0.1	6	40	47
KMM9.1	4.8(<10)	<50	+5	+8	0.1	7	36	43
KMM10	5.2(<15)	<70	+5	+8	0.1	7.5	33	40
KMM11	6(<20)	<70	+5	+9	0.1	8.5	30	36
KMM12	7(<20)	<90	+6	+9	0.1	9	28	32
KMM13	9(<25)	<110	+7	+9	0.1	10	25	29
KMM15	11(<30)	<110	+7	+9	0.1	11	23	27
KMM16	13(<40)	<170	+8	+9.5	0.1	12	20	24
KMM18	18(<50)	<170	+8	+9.5	0.1	14	18	21
KMM20	20(<50)	<220	+8	+10	0.1	15	17	20
KMM22	25(<55)	<220	+8	+10	0.1	17	16	18
KMM24	28(<80)	<220	+8	+10	0.1	18	13	16
KMM27	30(<80)	<250	+8	+10	0.1	20	12	14
KMM30	35(<80)	<250	+8	+10	0.1	22.5	10	13
KMM33	40(<80)	<250	+8	+10	0.1	25	9	12
KMM36	40(<90)	<250	+8	+10	0.1	27	9	11
KMM39	50(<90)	<300	+10	+12	0.1	29	8	10
KMM43	60(<100)	<700	+10	+12	0.1	32	7	9.2
KMM47	70(<100)	<750	+10	+12	0.1	35	6	8.5
KMM51	70(<100)	<750	+10	+12	0.1	38	6	7.8
KMM56	<135 <sup>(4)</sup>	<1000 <sup>(5)</sup>	typ. +10 <sup>(4)</sup>		0.1	42	5.2	7.1
KMM62	<150 <sup>(4)</sup>	<1000 <sup>(5)</sup>	typ. +10 <sup>(4)</sup>		0.1	47	4.8	6.4
KMM68	<200 <sup>(4)</sup>	<1000 <sup>(5)</sup>	typ. +10 <sup>(4)</sup>		0.1	51	4.1	5.8
KMM75	<250 <sup>(4)</sup>	<1500 <sup>(5)</sup>	typ. +10 <sup>(4)</sup>		0.1	55	3.9	5.3

notes: (1) Tested with pulses tp=5ms

(2) Valid provided that electrodes are kept at ambient temperature

(3) The ZMM1 is a silicon diode operated in forward direction. Hence, the index of all parameters should be "F" instead of "Z". Connect the cathode electrode to the negative pole.

(4) at Iz=2.5 mA

(5) at Iz=0.5 mA



## KMM1 THRU KMM75

■ Electrical characteristics (TA=25°C unless otherwise noted)

type ±5% Tol.	Zener Voltage range <sup>(1)</sup> at Iz Vz(V)		Test Current Iz (mA)	type ±2% Tol.	Zener Voltage range <sup>(1)</sup> at Iz Vz(V)		Test Current Iz (mA)
	min.	max.			min.	max.	
KMM1 <sup>(3)</sup>	0.70	0.80	5.0	ZMM1 <sup>(3)</sup>			
KMM2.4	2.20	2.60	5.0	ZMM2.4			
KMM2.7	2.50	2.90	5.0	ZMM2.7	2.65	2.75	5.0
KMM3	2.80	3.20	5.0	ZMM3	2.94	3.06	5.0
KMM3.3	3.10	3.50	5.0	ZMM3.3	3.23	3.37	5.0
KMM3.6	3.40	3.80	5.0	ZMM3.6	3.53	3.67	5.0
KMM3.9	3.70	4.10	5.0	ZMM3.9	3.82	3.98	5.0
KMM4.3	4.00	4.60	5.0	ZMM4.3	4.21	4.39	5.0
KMM4.7	4.40	5.00	5.0	ZMM4.7	4.61	4.79	5.0
KMM5.1	4.80	5.40	5.0	ZMM5.1	5.00	5.20	5.0
KMM5.6	5.20	6.00	5.0	ZMM5.6	5.49	5.71	5.0
KMM6.2	5.80	6.60	5.0	ZMM6.2	6.08	6.32	5.0
KMM6.8	6.40	7.20	5.0	ZMM6.8	6.66	6.94	5.0
KMM7.5	7.00	7.90	5.0	ZMM7.5	7.35	7.65	5.0
KMM8.2	7.70	8.70	5.0	ZMM8.2	8.04	8.36	5.0
KMM9.1	8.50	9.60	5.0	ZMM9.1	8.92	9.28	5.0
KMM10	9.4	10.6	5.0	ZMM10	9.80	10.2	5.0
KMM11	10.4	11.6	5.0	ZMM11	10.8	11.2	5.0
KMM12	11.4	12.7	5.0	ZMM12	11.8	12.2	5.0
KMM13	12.4	14.1	5.0	ZMM13	12.7	13.3	5.0
KMM15	13.8	15.6	5.0	ZMM15	14.7	15.3	5.0
KMM16	15.3	17.1	5.0	ZMM16	15.7	16.3	5.0
KMM18	16.8	19.1	5.0	ZMM18	17.6	18.4	5.0
KMM20	18.8	21.2	5.0	ZMM20	19.6	20.4	5.0
KMM22	20.8	23.3	5.0	ZMM22	21.6	22.4	5.0
KMM24	22.8	25.6	5.0	ZMM24	23.5	24.5	5.0
KMM27	25.1	28.9	5.0	ZMM27	26.5	27.5	5.0
KMM30	28.0	32.0	5.0	ZMM30	29.4	30.6	5.0
KMM33	31.0	35.0	5.0	ZMM33	32.3	33.7	5.0
KMM36	34.0	38.0	5.0	ZMM36	35.3	36.7	5.0
KMM39	37.0	41.0	5.0	ZMM39	38.2	39.8	5.0
KMM43	40.0	46.0	5.0	ZMM43	42.1	43.9	5.0
KMM47	44.0	50.0	5.0	ZMM47	46.1	47.9	5.0
KMM51	48.0	54.0	5.0	ZMM51	50.0	52.0	5.0
KMM56	52.0	60.0	2.5	ZMM56	54.9	46.9	2.5
KMM62	58.0	66.0	2.5	ZMM62	60.8	63.2	2.5
KMM68	64.0	72.0	2.5	ZMM68	66.6	69.4	2.5
KMM75	70.0	79.0	2.5	ZMM75	73.5	76.5	2.5

notes: (1) Tested with pulses tp=5ms

(2) Valid provided that electrodes are kept at ambient temperature

(3) The ZMM1 is a silicon diode operated in forward direction.Hence, the index of all parameters should be "F" instead of "Z" . Connect the cathode electrode to the negative pole.

