



# FUKUCOM COMPANY LTD.

## 福 靈 有 限 公 司

FLAT P, 3/F., EVEREST INDUSTRIAL CENTRE, 396 KWUN TONG ROAD,  
KWUN TONG, KOWLOON, HONG KONG.

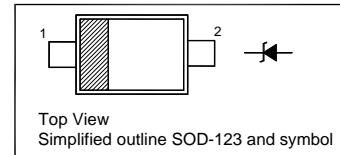
TEL: 852-2790 0314      FAX: 852-2790 0206

### MM1Z4689~MM1Z4717

### SILICON PLANAR ZENER DIODES

#### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

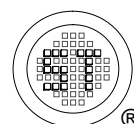


#### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Total Device Dissipation	$P_{tot}$	500	mW
Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_S$	- 55 to + 150	$^\circ\text{C}$

#### Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 10\text{ mA}$	$V_F$	0.9	V



Dated : 19/02/2008



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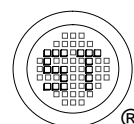
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Type	Marking Code	Zener Voltage <sup>1)</sup>				Reverse Leakage Current	
		V <sub>ZT</sub> (V)			at I <sub>ZT</sub>	I <sub>R</sub>	at V <sub>R</sub>
		Nom.	Min.	Max.	μA	Max. (μA)	V
MM1Z4689	BX	5.1	4.85	5.36	50	10	3
MM1Z4690	BY	5.6	5.32	5.88	50	10	4
MM1Z4691	BZ	6.2	5.89	6.51	50	10	5
MM1Z4692	CA	6.8	6.46	7.14	50	10	5.1
MM1Z4693	CB	7.5	7.13	7.88	50	10	5.7
MM1Z4694	CC	8.2	7.79	8.61	50	1	6.2
MM1Z4696	CE	9.1	8.65	9.56	50	1	6.9
MM1Z4697	CF	10	9.5	10.5	50	1	7.6
MM1Z4698	CH	11	10.45	11.55	50	0.05	8.4
MM1Z4699	CJ	12	11.4	12.6	50	0.05	9.1
MM1Z4700	CK	13	12.35	13.65	50	0.05	9.8
MM1Z4702	CN	15	14.25	15.75	50	0.05	11.4
MM1Z4703	CP	16	15.2	16.8	50	0.05	12.1
MM1Z4705	CX	18	17.1	18.9	50	0.05	13.6
MM1Z4707	CZ	20	19	21	50	0.01	15.2
MM1Z4708	DA	22	20.9	23.1	50	0.01	16.7
MM1Z4709	DB	24	22.8	25.2	50	0.01	18.2
MM1Z4711	DD	27	25.65	28.35	50	0.01	20.4
MM1Z4713	DF	30	28.5	31.5	50	0.01	22.8
MM1Z4714	DH	33	31.35	34.65	50	0.01	25
MM1Z4715	DJ	36	34.2	37.8	50	0.01	27.3
MM1Z4716	DK	39	37.05	40.95	50	0.01	29.6
MM1Z4717	DM	43	40.85	45.15	50	0.01	32.6

<sup>1)</sup> Tested with pulses tp = 20 ms.



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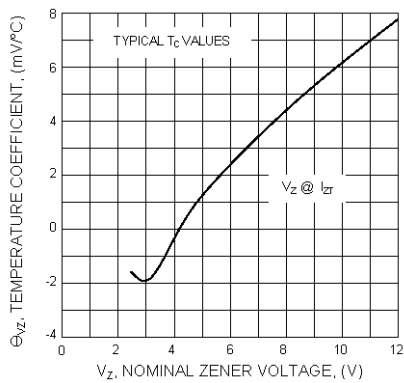
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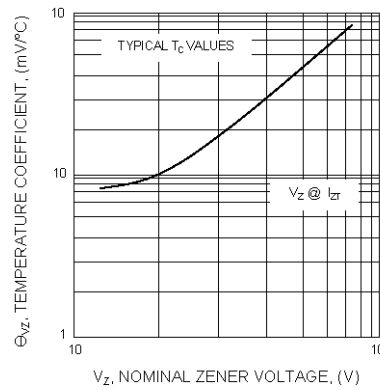
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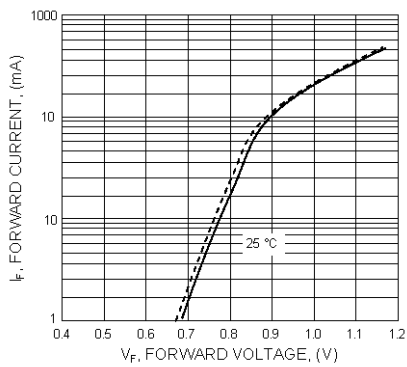
**FIG.1 - TEMPERATURE COEFFICIENTS**  
(TEMPERATURE RANGE -55 °C to +150 °C)



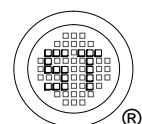
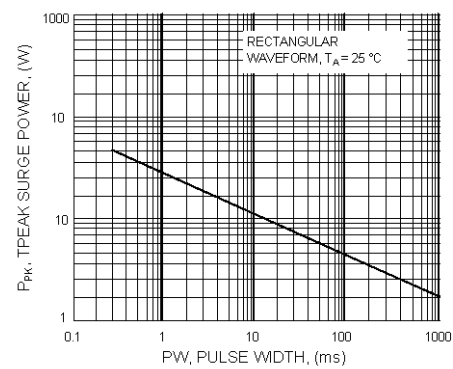
**FIG.2 - TEMPERATURE COEFFICIENTS**  
(TEMPERATURE RANGE -55 °C to +150 °C)



**FIG.3 - TYPICAL FORWARD VOLTAGE**



**FIG.4 - MAXIMUM NON-REPETITIVE SURGE POWER**



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**PACKAGE OUTLINE**

Plastic surface mounted package; 2 leads

SOD-123

