

## Zener Diodes

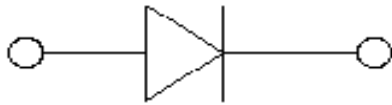


### Features

- High reliability
- Very sharp reverse characteristic
- Low reverse current level
- Zener Voltage 1.8V~39V

### Mechanical Data

- **Package:** SOD-123
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end



### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	VALUE
Power Dissipation	P <sub>D</sub>	mW	500
Storage Temperature Range	T <sub>stg</sub>	°C	-55~+150
Maximum Junction Temperature	T <sub>J</sub>	°C	-55~+150
Maximum Regulator Current	I <sub>ZM</sub>	mA	P <sub>D</sub> / V <sub>Z</sub>
Maximum Forward Voltage (I <sub>F</sub> =10mA <sub>dc</sub> )	V <sub>F</sub>	V	0.95
Thermal Resistance Junction to Ambient Air*	R <sub>θJA</sub>	°C /W	340



# MMSZ4678 THRU MMSZ4716

## ■Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

Type Number	Device Marking	V <sub>Z</sub> @ I <sub>Zt</sub> (V)				I <sub>R</sub> (μA)@V <sub>R</sub>	
		Min	Typ	Max	I <sub>Zt</sub> (μA)	I <sub>R</sub> (μA)	V <sub>R</sub> (V)
MMSZ4678	CC	1.71	1.8	1.89	50	7.5	1
MMSZ4679	CD	1.90	2.0	2.10	50	5	1
MMSZ4680	CE	2.09	2.2	2.31	50	4	1
MMSZ4681	CF	2.28	2.40	2.52	50	2	1
MMSZ4682	CH	2.565	2.7	2.835	50	1	1
MMSZ4683	CJ	2.85	3.0	3.15	50	0.8	1
MMSZ4684	CK	3.135	3.3	3.465	50	7.5	1.5
MMSZ4685	CM	3.42	3.6	3.78	50	7.5	2.0
MMSZ4686	CN	3.705	3.9	4.095	50	5.0	2.0
MMSZ4687	CP	4.085	4.3	4.515	50	4.0	2.0
MMSZ4688	CT	4.465	4.7	4.935	50	10	3.0
MMSZ4689	CU	4.845	5.1	5.355	50	10	3.0
MMSZ4690	CV	5.32	5.6	5.88	50	10	4.0
MMSZ4691	CA	5.89	6.2	6.51	50	10	5.0
MMSZ4692	CX	6.46	6.8	7.14	50	10	5.1
MMSZ4693	CY	7.125	7.5	7.875	50	10	5.7
MMSZ4694	CZ	7.79	8.2	8.61	50	1	6.2
MMSZ4695	DC	8.265	8.7	9.135	50	1	6.6
MMSZ4696	DD	8.645	9.1	9.555	50	1	6.9
MMSZ4697	DE	9.50	10	10.5	50	1	7.6
MMSZ4698	DF	10.45	11	11.55	50	0.05	8.4
MMSZ4699	DH	11.40	12	12.6	50	0.05	9.1
MMSZ4700	DJ	12.35	13	13.65	50	0.05	9.8
MMSZ4701	DK	13.30	14	14.7	50	0.05	10.6
MMSZ4702	DM	14.25	15	15.75	50	0.05	11.4
MMSZ4703	DN	15.20	16	16.8	50	0.05	12.1



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MMSZ4704	DP	16.15	17	17.85	50	0.05	12.9
MMSZ4705	DT	17.10	18	18.9	50	0.05	13.6
MMSZ4706	DU	18.05	19	19.95	50	0.05	14.4
MMSZ4707	DV	19.00	20	21	50	0.01	15.2
MMSZ4708	DA	20.9	22	23.1	50	0.01	16.7
MMSZ4709	DX	22.8	24	25.2	50	0.01	18.2
MMSZ4710	DY	23.75	25	26.25	50	0.01	19.0
MMSZ4711	EA	25.65	27	28.35	50	0.01	20.4
MMSZ4712	EC	26.6	28	29.4	50	0.01	21.2
MMSZ4713	ED	28.5	30	31.5	50	0.01	22.8
MMSZ4714	EE	31.35	33	34.65	50	0.01	25
MMSZ4715	EF	34.2	36	37.8	50	0.01	27.3
MMSZ4716	EH	37.05	39	40.95	50	0.01	29.6

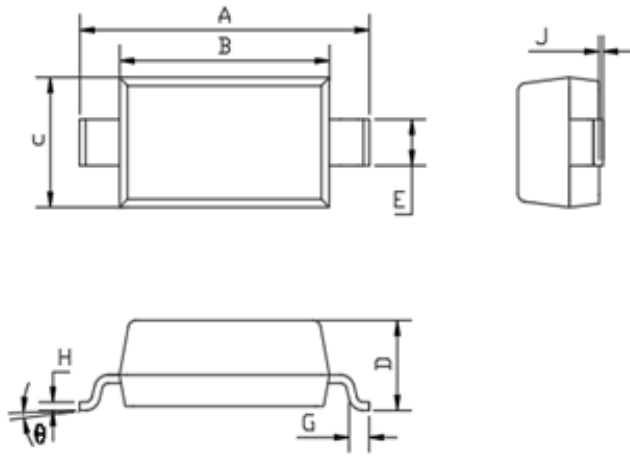
### ■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
MMSZ4678 THRU MMSZ4716	F2	Approximate 0.011	3000	30000	120000	7" reel



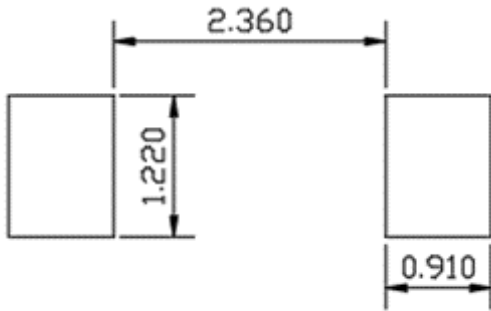
# MMSZ4678 THRU MMSZ4716

## ■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
$\theta$	0	8°	0	8°

## ■ Soldering Footprint



UNIT: mm



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