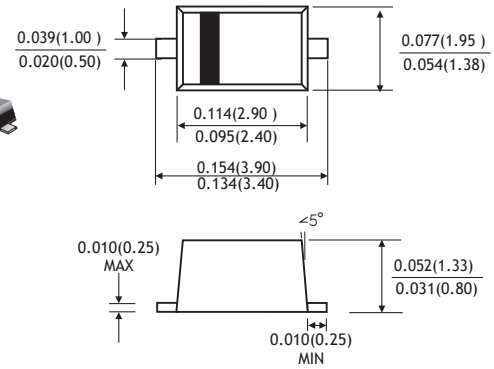
1W SILICON PLANAR ZENER DIODES

FEATURES

- Total power dissipation: max. 1W
- Small plastic package suitable for surface mounted design
- Low Zener impedance under low current
- High Reliability
- Tolerance approximately ±5%
- High temperature soldering guaranteed: 260° C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



SOD-123FL



Dimensions in inches and (millimeters)

MECHANICAL DATA

- Case: SOD-123FL plastic case
- Polarity: cathode by color band
- Mounting Position: Any

ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) (T_A=25°C)

Parameter	*Symbols*	*Value*	*Units*
Zener current see table "Characteristics"			
Power dissipation	P_{tot}	1	W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55 to+150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C)

Parameter	*Symbols*	*Min*	*Typ*	*Max*	*Units*
Thermal resistance junction to ambient	$R_{\theta JA}$		100	130	℃/W
Forward voltage at I_F=200mA	V_F			1.2	V

Electrical Characteristics (Ratings at 25 ℃ ambient temperature unless otherwise specified).

Part Number	Device Marking Code	Nominal Zener voltage		Maximum Zener impedance			Maximum reverse Leakage Current		Maximum DC Zener Current
		VZ @IZT		ZZT@IZT	ZZK@IZK	IZK	IR@VR		IZM
		V	mA	Ω	Ω	mA	μA	VR	mA
MMIW3V6	W5	3.6	100	10	400	1	100	1	252
MMIW3V9	W6	3.9	100	9	400	1	50	1	234
MMIW4V3	W7	4.3	100	9	400	1	10	1	217
MMIW5V1	W8	4.7	100	8	400	1	10	1	193
MMIW5V1	W9	5.1	100	7	500	1	10	1	178
MMIW5V6	WA	5.6	100	5	700	1	10	2	162
MMIW6V2	WB	6.2	100	2	700	1	10	3	146
MMIW6V8	WC	6.8	100	3.5	700	1	10	4	133
MMIW7V5	WD	7.5	100	4	700	0.5	10	5	121
MMIW8V2	WE	8.2	100	4.5	700	0.5	10	6	110
MMIW9V1	WF	9.1	50	5	700	0.5	10	7	100
MMIW10	WG	10	50	7	700	0.25	10	7.6	91
MMIW11	WH	11	50	8	700	0.25	5	8.4	83
MMIW12	WI	12	50	9	700	0.25	5	9.1	76
MMIW13	WK	13	50	10	700	0.25	5	9.9	69
MMIW15	WL	15	50	14	700	0.25	5	11.4	61
MMIW16	WM	16	25	16	700	0.25	5	12.2	57
MMIW18	WN	18	25	20	700	0.25	5	13.7	50
MMIW20	WO	20	25	22	750	0.25	5	15.2	45
MMIW22	WP	22	25	23	750	0.25	5	16.7	41
MMIW24	WR	24	25	25	750	0.25	5	18.2	38
MMIW27	WS	27	25	35	750	0.25	5	20.6	34
MMIW30	WT	30	25	40	750	0.25	5	22.8	30
MMIW33	WU	33	25	45	1000	0.25	5	25.1	27
MMIW36	WW	36	10	50	1000	0.25	5	27.4	25
MMIW39	WX	39	10	60	1000	0.25	5	29.7	23
MMIW43	WY	43	10	70	1000	0.25	5	32.7	22
MMIW47	WZ	47	10	80	1500	0.25	5	35.8	19
MMIW51	X1	51	10	95	1500	0.25	5	38.8	18
MMIW56	X2	56	10	110	1500	0.25	5	42.6	16

Part Number	Device Marking Code	Nominal Zener voltage		Maximum Zener impedance			Maximum reverse Leakage Current		Maximum DC Zener Current
		VZ @IZT		ZZT@IZT	ZZK@IZK	IZK	IR@VR		IZM
		V	mA	Ω	Ω	mA	μA	VR	mA
MMIW62	X3	62	10	125	2000	0.25	5	47.1	14
MMIW68	X4	68	10	150	2000	0.25	5	51.7	13
MMIW75	X5	75	10	175	2000	0.25	5	56	12
MMIW82	X6	82	10	200	2000	0.25	5	62.2	11
MMIW91	X7	91	5	250	3000	0.25	5	69.2	10
MMIW100	X8	100	5	350	3000	0.25	5	76	9
MMIW110	X9	110	5	450	3000	0.25	5	83.6	8.6
MMIW120	XA	120	5	550	4000	0.25	5	91.2	7.8
MMIW130	XB	130	5	700	4500	0.25	5	98.8	7
MMIW150	XC	150	5	1000	5000	0.25	5	114	6.4
MMIW160	XD	160	5	1100	6000	0.25	5	121.6	5.8
MMIW180	XE	180	5	1200	6500	0.25	5	136.8	5.2

Typical Characteristics

Fig. 1 - Power Derating Curve

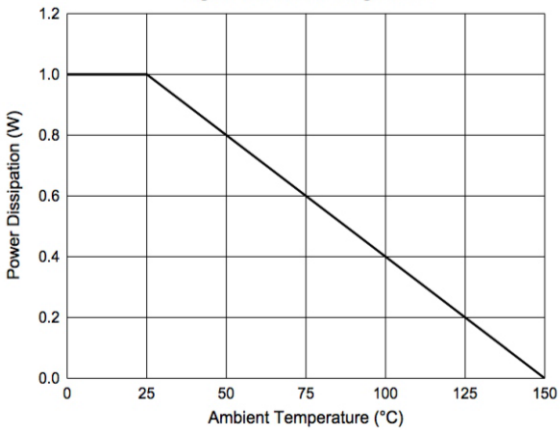


Fig. 2 - Typical Forward Characteristics

