

## Features

- Ideally Suited for Automatic Assembly
- Standard  $V_Z$  Tolerance is +/- 5%
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant t (Note1)("P" Suffix Designates Compliant. See Ordering Information)

## Maximum Ratings

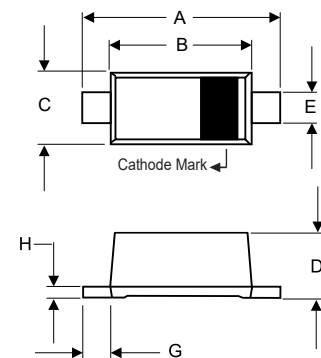
- Operating Junction Temperature Range: -55°C to +150°C
- Storage Temperature Range: -55°C to +150°C
- Thermal Resistance: 110°C/W Junction to Ambient
- Thermal Resistance: 9°C/W Junction to Soldering Point

Parameter	Symbol	Rating	Conditions
Zener Current	$I_{ZM}$	$P_d/V_z$ (mA)	
Power Dissipation	$P_{tot}$	1.0W	$T_A=50^\circ C$
Forward Voltage	$V_F$	1.2V	$I_F=200mA$

Note: 1. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.

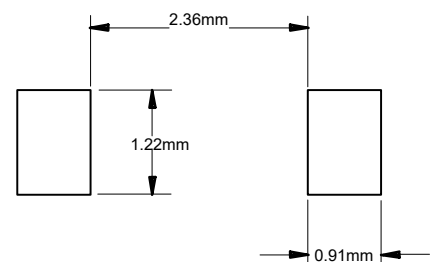
# 1 Watt Zener Diode 5.1V - 100V Volts

## SOD-123FL



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.130	0.152	3.30	3.85	
B	0.100	0.122	2.55	3.10	
C	0.055	0.075	1.40	1.90	
D	0.035	0.053	0.90	1.35	
E	0.020	0.041	0.50	1.05	
G	0.010	----	0.25	----	
H	----	0.010	----	0.25	

## SUGGESTED SOLDER PAD LAYOUT



**Electrical Characteristics @ 25°C Unless Otherwise Specified**

MCC Part Number	Zener Voltage <sup>(2)</sup>				Maximum Zener Impedance	Maximum Reverse Current <sup>(2)</sup> I <sub>R</sub> @ V <sub>R</sub>		Marking Code
	V <sub>Z</sub> @ I <sub>ZT</sub>			I <sub>ZT</sub> mA		Z <sub>ZT</sub> @ I <sub>ZT</sub> Ω	I <sub>R</sub> μA	
	Min.(V)	Nom(V)	Max.(V)					
DFLZ5V1	4.8	5.1	5.4	49	7	10	1.0	5V1
DFLZ5V6	5.3	5.6	5.9	45	5	10	2.0	5V6
DFLZ6V2	5.8	6.2	6.4	100	3	5	2.0	6V2
DFLZ6V8	6.4	6.8	7.2	100	3	5	3.0	6V8
DFLZ7V5	7.0	7.5	7.9	100	2	5	3.0	7V5
DFLZ8V2	7.7	8.2	8.7	100	2	5	3.0	8V2
DFLZ9V1	8.5	9.1	9.6	50	4	5	5.0	9V1
DFLZ10	9.4	10	10.6	50	4	5	7.5	Z10
DFLZ11	10.4	11	11.6	50	7	4	8.2	Z11
DFLZ12	11.4	12	12.7	50	7	3	9.1	Z12
DFLZ13	12.4	13	14.1	50	10	2	10.0	Z13
DFLZ15	13.8	15	15.6	50	10	1	11.0	Z15
DFLZ16	15.3	16	17.1	25	15	1	12.0	Z16
DFLZ18	16.8	18	19.1	25	15	1	13.0	Z18
DFLZ20	18.8	20	21.2	25	15	1	15.0	Z20
DFLZ22	20.8	22	23.3	25	15	1	16.0	Z22
DFLZ24	22.8	24	25.6	25	15	1	18.0	Z24
DFLZ27	25.1	27	28.9	25	15	1	20.0	Z27
DFLZ30	28.0	30	32.0	25	15	1	22.0	Z30
DFLZ33	31.0	33	35.0	25	15	1	24.0	Z33
DFLZ36	34.0	36	38.0	10	40	1	27.0	Z36
DFLZ39	37.0	39	41.0	10	40	1	30.0	Z39
DFLZ43	40.8	43	45.2	6.0	70	5	32.7	Z43
DFLZ47	44.6	47	49.4	5.5	80	5	35.8	Z47
DFLZ51	48.4	51	53.6	5.0	95	5	38.8	Z51
DFLZ56	53.2	56	58.8	4.5	110	5	42.6	Z56
DFLZ62	58.9	62	65.1	4.0	125	5	47.1	Z62
DFLZ68	64.6	68	71.4	3.7	150	5	51.7	Z68
DFLZ75	71.2	75	78.8	3.3	175	5	56.0	Z75
DFLZ82	77.9	82	86.1	3.0	200	5	62.2	Z82
DFLZ91	86.4	91	95.6	2.8	250	5	69.2	Z91
DFLZ100	95.0	100	105.0	2.5	350	5	76.0	Z100

Note : 2. Short Duration Pulse Test Used to Minimize Self-heating Effect.

## Curve Characteristics

Fig. 1 - Power Derating Curve

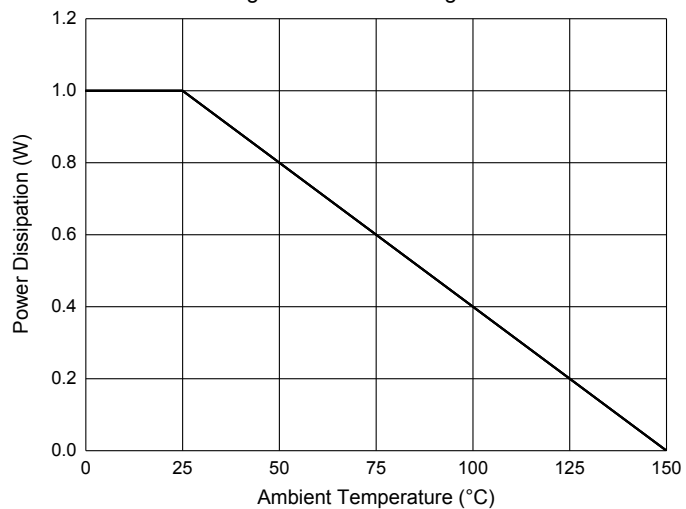
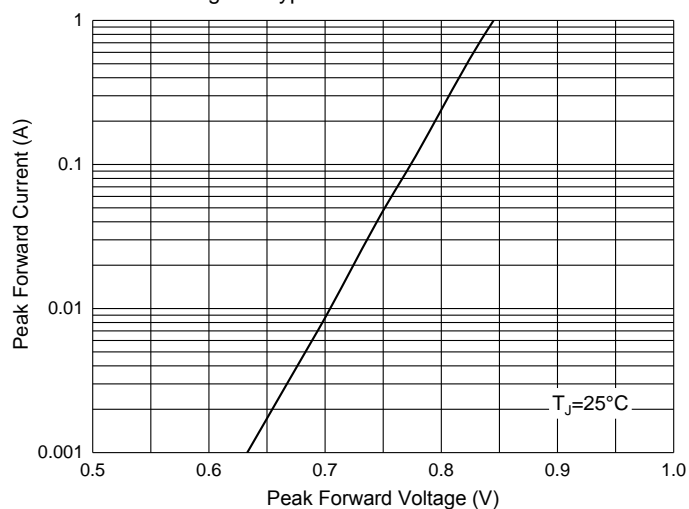


Fig. 2 - Typical Forward Characteristics



## Ordering Information

Device	Packing
Part Number-TP	Tape&Reel:2.5Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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