

Features

- Low Profile Package
- Ideal for Automated Placement
- Fully Automotive Qualified to AEC-Q101
- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant (Note2) ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings(@ 25°C Unless Otherwise Specified)

Parameter	Symbol	Rating	Unit
DC Power Dissipation at $T_L = 75^\circ\text{C}$	P_D	1	W
Maximum Instantaneous Forward Voltage@ $I_F = 200\text{mA}$	V_F	1.2	V
Operating Junction Temperature Range	T_J	-55~175	°C
Storage Temperature Range	T_{stg}	-55~175	°C

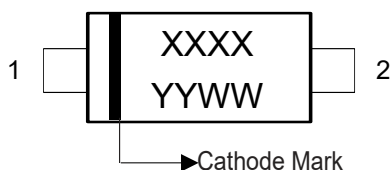
Thermal Characteristics(@ 25°C Unless Otherwise Specified)

Parameter	Symbol	Rating	Unit
Typical Thermal Resistance Junction to Lead	$R_{\theta JL}$	100	°C/W
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	120	°C/W
Typical Thermal Resistance Junction to Case	$R_{\theta JC}$	30	°C/W

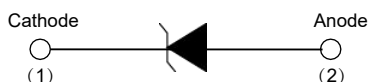
Note:

1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.
2. High Temperature Solder Exemption Applied, see EU Directive Annex 7a.
3. Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 3mm x 3mm copper pad areas

Simplified outline



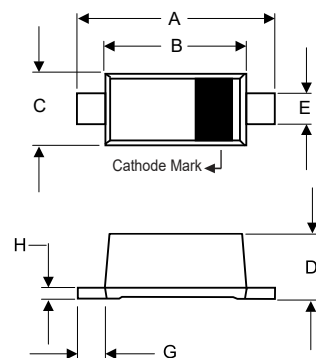
Graphic symbol



XXXX = Marking code YYWW = Date Code

1 Watt Zener Diode 6.2 to 100 Volts

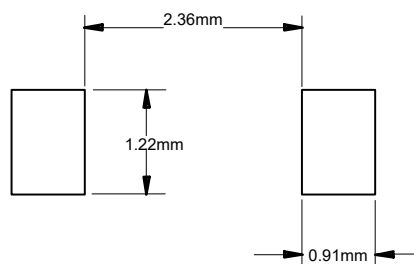
SOD-123FL



DIMENSIONS

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

Part Number	Nominal Zener Voltage			Test Current	Maximum Dynamic Impedance Resistance			Maximum Reverse leakage Current		Maximum DC Zener Current	Marking Code
	VZ@IZT				IZT	ZZT at IZT	ZZK at IZK	IZK	IR		
	Min(V)	Nom(V)	Max(V)	mA						Ω	
DFLZ6V2Q	5.89	6.20	6.51	41.0	2.0	700	1.00	10.0	3.0	146.0	6V2
DFLZ6V8Q	6.46	6.80	7.14	37.0	3.5	700	1.00	10.0	4.0	133.0	6V8
DFLZ7V5Q	7.13	7.50	7.88	34.0	4.0	700	0.50	10.0	5.0	121.0	7V5
DFLZ8V2Q	7.79	8.20	8.61	31.0	4.5	700	0.50	10.0	6.0	110.0	8V2
DFLZ9V1Q	8.65	9.10	9.56	28.0	5.0	700	0.50	10.0	7.0	100.0	9V1
DFLZ10Q	9.50	10.00	10.50	25.0	7.0	700	0.25	10.0	7.6	91.0	Z10
DFLZ11Q	10.45	11.00	11.55	23.0	8.0	700	0.25	5.0	8.4	83.0	Z11
DFLZ12Q	11.40	12.00	12.60	21.0	9.0	700	0.25	5.0	9.1	76.0	Z12
DFLZ13Q	12.35	13.00	13.65	19.0	10.0	700	0.25	5.0	9.9	69.0	Z13
DFLZ15Q	14.25	15.00	15.75	17.0	14.0	700	0.25	5.0	11.4	61.0	Z15
DFLZ16Q	15.20	16.00	16.80	15.5	16.0	700	0.25	5.0	12.2	57.0	Z16
DFLZ18Q	17.10	18.00	18.90	14.0	20.0	750	0.25	5.0	13.7	50.0	Z18
DFLZ20Q	19.00	20.00	21.00	12.5	22.0	750	0.25	5.0	15.2	45.0	Z20
DFLZ22Q	20.90	22.00	23.10	11.5	23.0	750	0.25	5.0	16.7	41.0	Z22
DFLZ24Q	22.80	24.00	25.20	10.5	25.0	750	0.25	5.0	18.2	38.0	Z24
DFLZ27Q	25.65	27.00	28.35	9.5	35.0	750	0.25	5.0	20.6	34.0	Z27
DFLZ30Q	28.50	30.00	31.50	8.5	40.0	1000	0.25	5.0	22.8	30.0	Z30
DFLZ33Q	31.35	33.00	34.65	7.5	45.0	1000	0.25	5.0	25.1	27.0	Z33
DFLZ36Q	34.20	36.00	37.80	7.0	50.0	1000	0.25	5.0	27.4	25.0	Z36
DFLZ39Q	37.05	39.00	40.95	6.5	60.0	1000	0.25	5.0	29.7	23.0	Z39
DFLZ43Q	40.85	43.00	45.15	6.0	70.0	1500	0.25	5.0	32.7	22.0	Z43
DFLZ47Q	44.65	47.00	49.35	5.5	80.0	1500	0.25	5.0	35.8	19.0	Z47
DFLZ51Q	48.45	51.00	53.55	5.0	95.0	1500	0.25	5.0	38.8	18.0	Z51
DFLZ56Q	53.20	56.00	58.80	4.5	110.0	2000	0.25	5.0	42.6	16.0	Z56
DFLZ62Q	58.90	62.00	65.10	4.0	125.0	2000	0.25	5.0	47.1	14.0	Z62
DFLZ68Q	64.60	68.00	71.40	3.7	150.0	2000	0.25	5.0	51.7	13.0	Z68
DFLZ75Q	71.25	75.00	78.75	3.3	175.0	2000	0.25	5.0	56.0	12.0	Z75
DFLZ82Q	77.90	82.00	86.10	3.0	200.0	3000	0.25	5.0	62.2	11.0	Z82
DFLZ91Q	86.45	91.00	95.55	2.8	250.0	3000	0.25	5.0	69.2	10.0	Z91
DFLZ100Q	95.00	100.00	105.00	2.5	350.0	3000	0.25	5.0	76.0	9.0	Z100

Curve Characteristics

Fig. 1 - Power Derating Curve

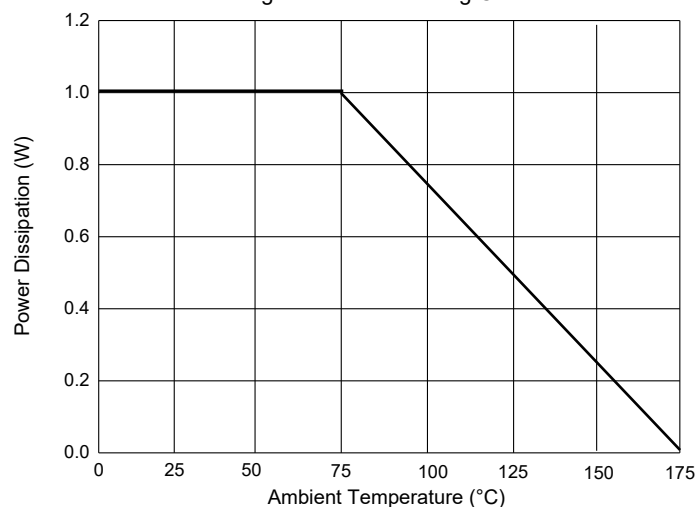


Fig. 2 - Typical Forward Characteristics

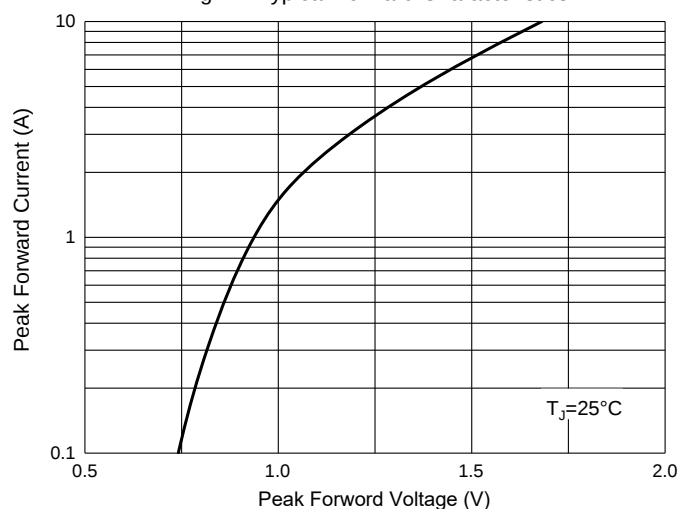


Fig. 3 - Pulse Waveform

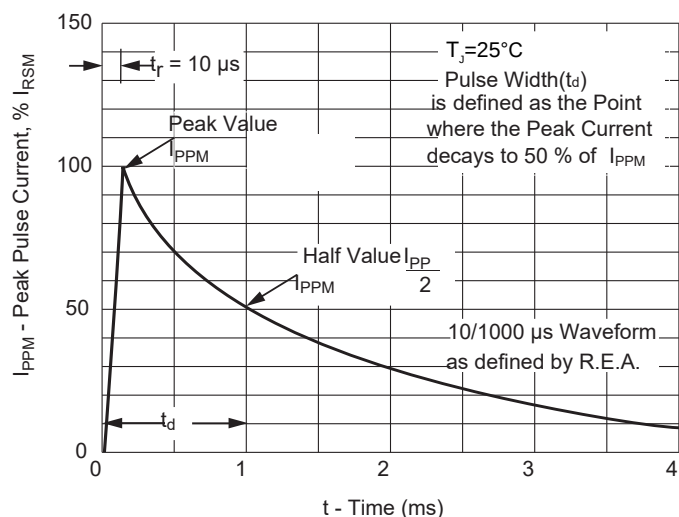
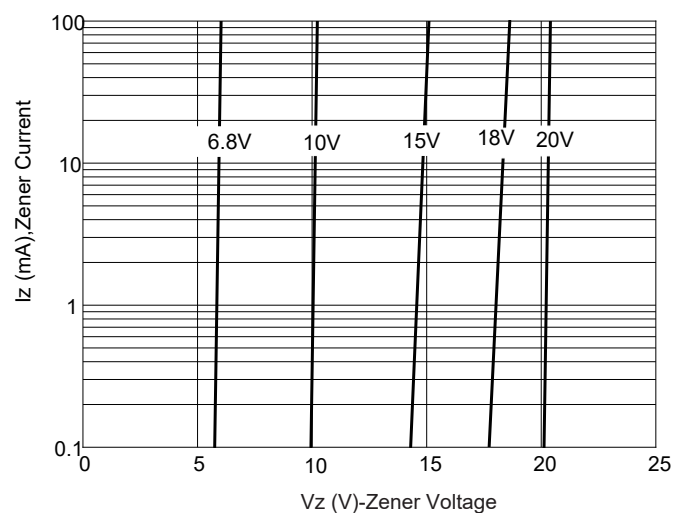


Fig.4 -Typical Zener Breakdown Characteristics



Ordering Information

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

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