TECH PUBLIC
台舟电子

TPLNZ8F5V1T5G

SURFACE MOUNT ZENER DIODES

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Features

- Low Zener Impedance
- Power Dissipation of 200mW
- High Stability and High Reliability
- Halogen free and RoHS compliant

Mechanical Characteristics

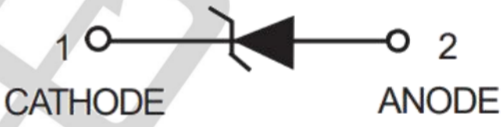
- DFN1006-2 surface mount package
- Mounting position: Any
- Qualified max reflow temperature:260℃

Applications

- General voltage regulation
- Mobile & handheld systems
- High density PC boards



DFN1006-2



Pin Configuration

Maximum Ratings& Thermal Characteristics

(Tamb=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Forward Voltage @ IF=10mA	VF	0.9	V
Power Dissipation	PD	200	mW
Thermal Resistance (Junction-to-Ambient)	RθJA	500	°C/W
Thermal Resistance (Junction-to-Case)	RθJC	200	°C/W
Junction Temperature Range	TJ	-55 ~ +150	°C
Storage Temperature Range	TSTG	-65 ~ +150	°C

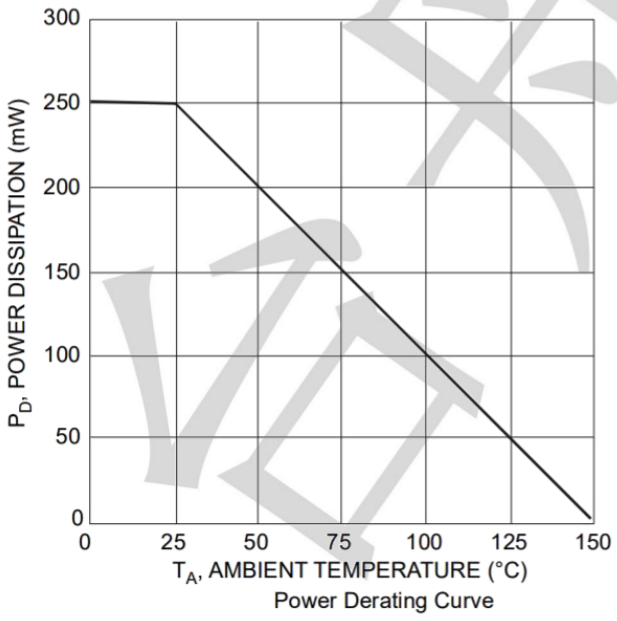
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Electrical Characteristics

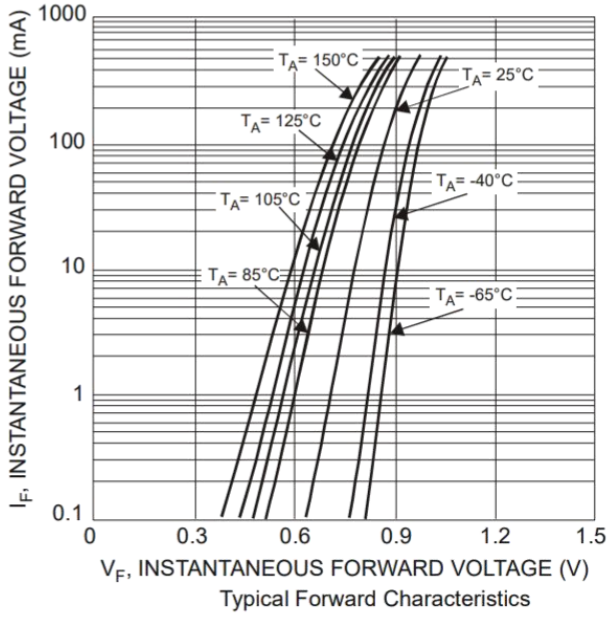
(TA=25°C unless otherwise specified)

Device	Zener Voltage Range				Maximum Zener Impedance f = 1kHz			Maximum Reverse Current		Typical Temperature coefficent @ IZTC=mV/℃		Test Current IZTC
	Vz@Izt			Izt	Zzt @Izt	Zzk @Izk	Izk	IR	VR			
	Nom(V)	Min(V)	Max(V)	mA	Ω		mA	uA	V	Min	Max	mA
TPLNZ8F5V1T5G	5.1	4.8	5.4	5	60	480	1.0	2	2	-2.7	1.2	5

Typical Characteristics Curves



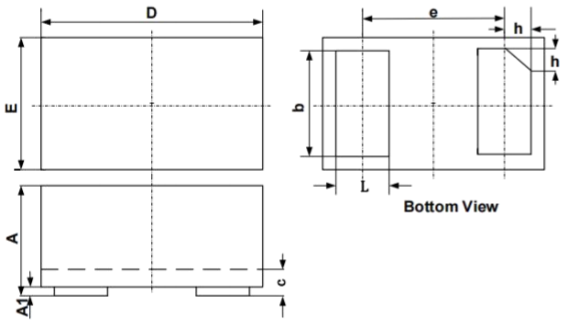
Power Derating Curve



Typical Forward Characteristics

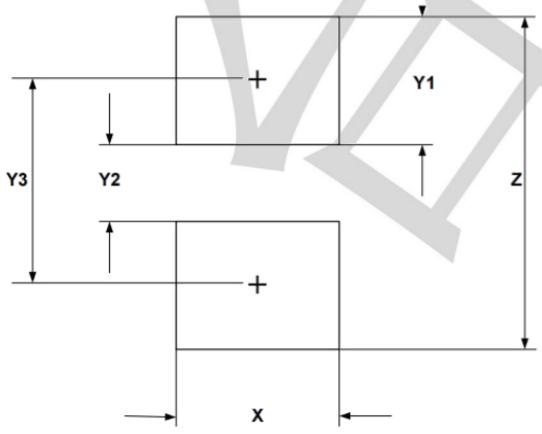
Package Outline & Dimensions

DFN1006-2 (0402)



SYM	DIMENSIONS					
	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.45	0.50	0.55	0.018	0.020	0.022
A1	0.00	0.02	0.05	0.000	0.001	0.002
b	0.45	0.50	0.55	0.018	0.020	0.022
c	0.12	0.15	0.18	0.005	0.006	0.007
D	0.95	1.00	1.05	0.037	0.039	0.041
e	0.65 BSC			0.026 BSC		
E	0.55	0.60	0.65	0.022	0.024	0.026
L	0.20	0.25	0.30	0.008	0.010	0.012
h	0.07	0.12	0.17	0.003	0.005	0.007

Suggested Land Pattern



SYM	DIMENSIONS	
	MILLIMETERS	INCHES
X	0.60	0.024
Y1	0.50	0.020
Y2	0.30	0.012
Y3	0.80	0.032
Z	1.30	0.052