

Zener Voltage Regulators

Description

The PZ04201P1 is a zener diode which is assembled into a DFN1006-2L Surface-Mounted Device (SMD) plastic package.

Features

- Standard zener breakdown voltage range 5.1V
- Steady state power rating of 250mW
- ESD rating of class3(>16kV)per human body model
- RoHS compliant transient

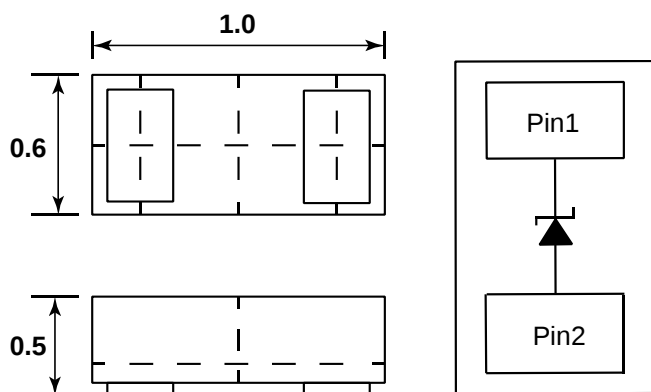
Mechanical Characteristics

- Package: DFN1006-2
- Case Material: “Green” Molding Compound
- Moisture Sensitivity: Level 1 per J-STD-020
- Marking Information: See Below

Applications

- Cellular phones
- Hand held portables
- High density PC boards

Dimensions and Pinonfiguration



Package Dimensions

Circuit and Pin Schematic

Marking Information



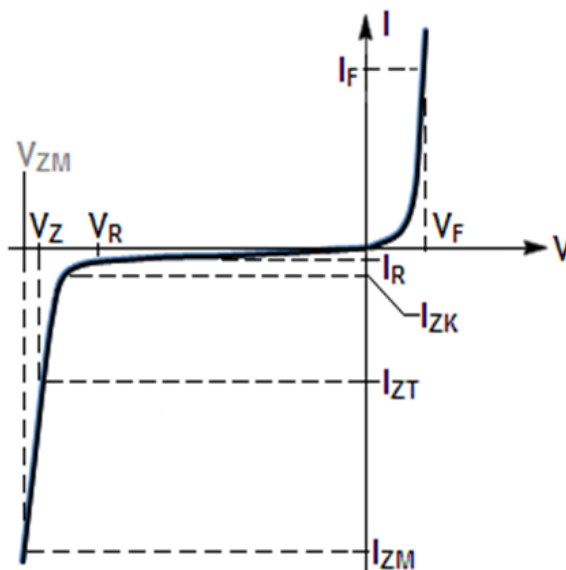
ZL. = Device Making Code
Bar denotes cathode

Ordering Information

Part Number	Shipping	Reel Size
PZ04201P1	10000/Tape & Reel	7 inch

Electrical Characteristics (T_A=25°C unless otherwise specified)

Symbol	Parameter
V _Z	Reverse Zener Voltage @ I _{ZT}
I _{ZT}	Zener (DC)current at specified test point
Z _{ZT}	Maximum Zener Impedance @ I _{ZT}
I _{ZK}	Zener (DC)current near breakdown knee
Z _{ZK}	Maximum Zener Impedance @ I _{ZK}
I _{ZM}	Maximum Zener current
V _{ZM}	Maximum Zener voltage
P _D	Maximum steady-state power dissipation(=I _{ZM} ×V _{ZM})
I _R	Reverse Leakage Current @ V _R
V _R	Reverse Voltage
I _F	Forward Current
V _F	Forward Voltage @ I _F



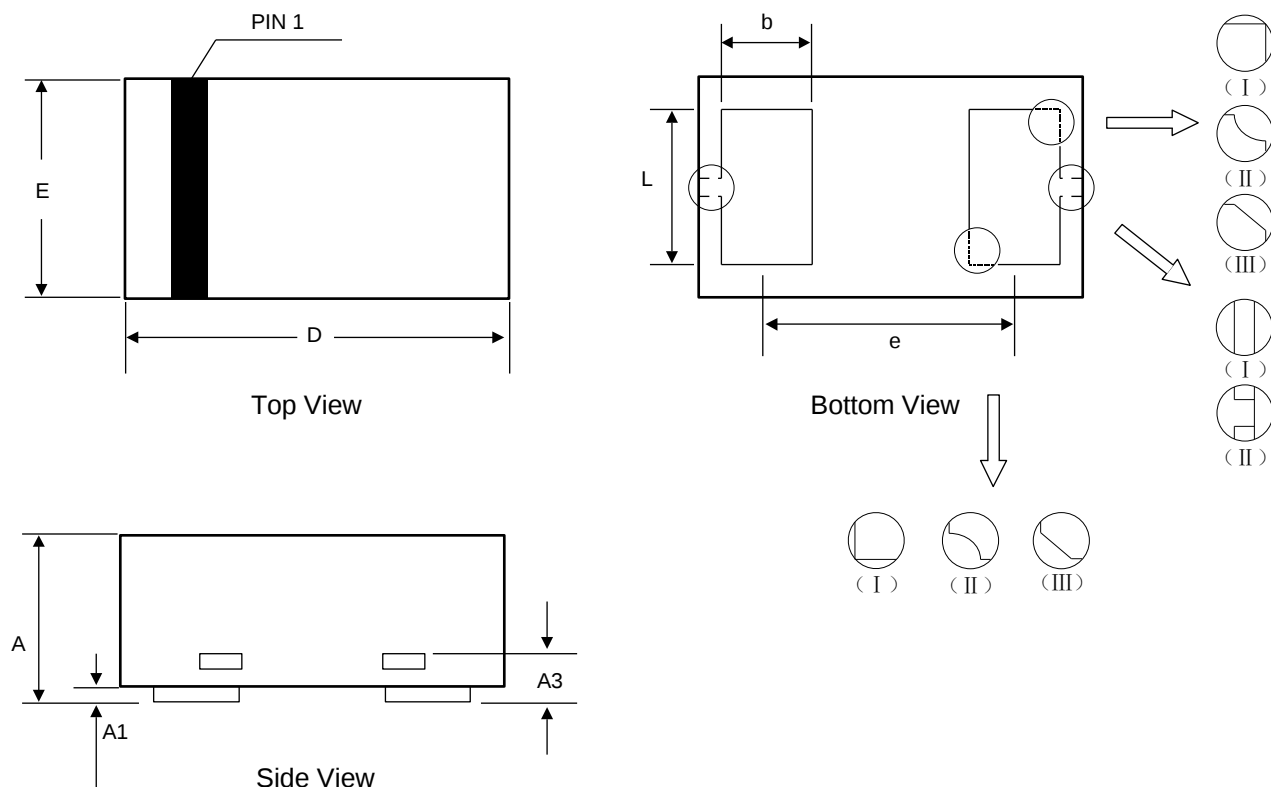
Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Items	Symbol	Value	Unit
Power dissipation	P _D	250	mW
Typical thermal resistance, junction to ambient ⁽¹⁾	R _{θJA}	625	°C/W
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

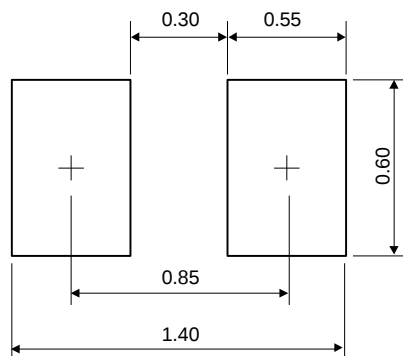
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Zener Voltage	V _Z	4.9	5.1	-	V	I _{ZT} =5mA
Maximum Zener Impedance	Z _{ZT}	-	-	55	Ω	I _{ZT} =5mA
Maximum Zener Impedance	Z _{ZK}	-	-	500	Ω	I _{ZK} =1mA
Reverse Leakage Current	I _R	-	-	20	uA	V _R =4.2V
Forward Voltage	V _F	-	-	1.25	V	I _F =100mA
Junction Capacitance			60	100	pF	V _R = 0V, f = 1MHz

DFN1006-2 Package Outline Drawing



Symbol	Dimensions in Millimeters		
	Min.	Typ.	Max.
A	0.340	0.450	0.550
A1	0.000	0.020	0.050
A3	0.125 Ref.		
D	0.950	1.000	1.075
E	0.490	0.600	0.675
b	0.200	0.250	0.300
L	0.450	0.500	0.550
e	0.650 BSC		

Recommended PCB Layout (Unit: mm)

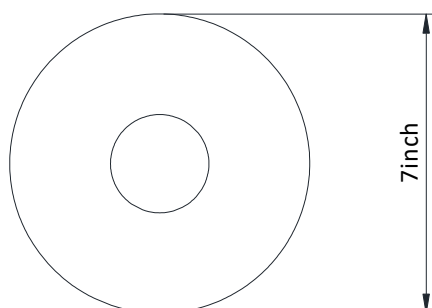


Notes:

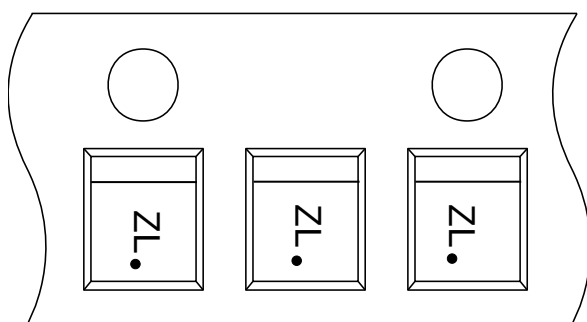
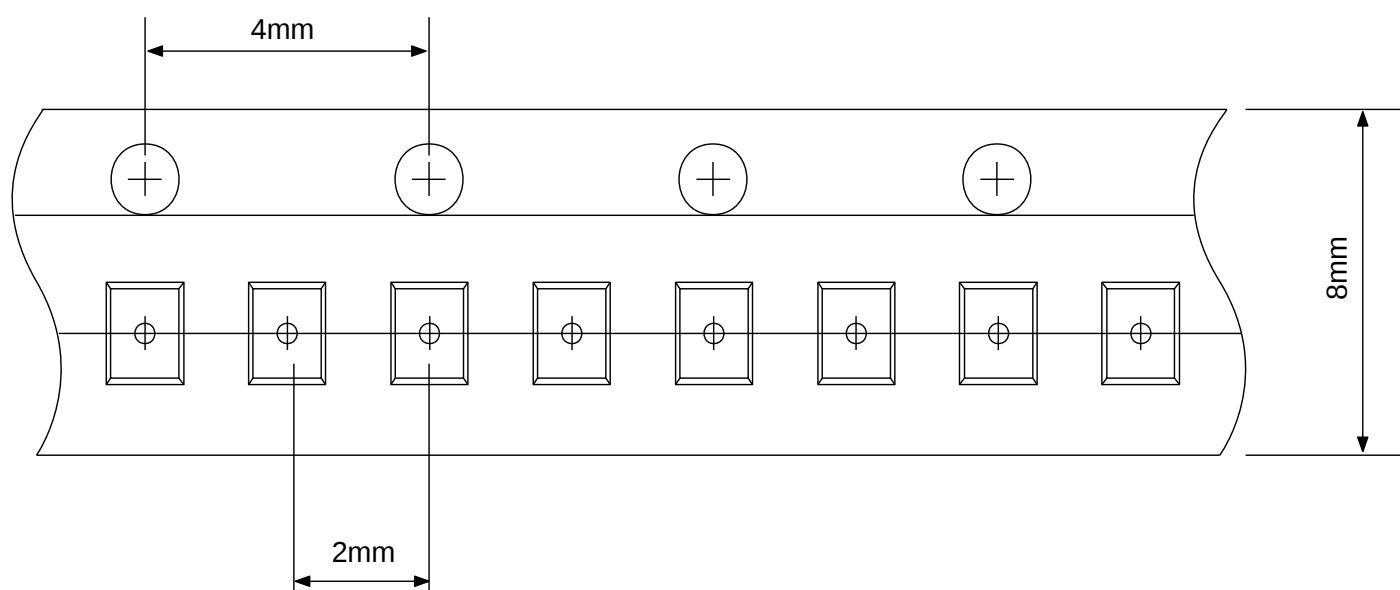
This recommended land pattern is for reference purposes only. Please consult your manufacturing group to ensure your PCB design guidelines are met.

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed

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