

500mW , SOD-523 Zener Diode**Description**

The PZ04201D5 is a zener diode which is assembled into a SOD-523 Surface-Mounted Device (SMD) plastic package.

Features

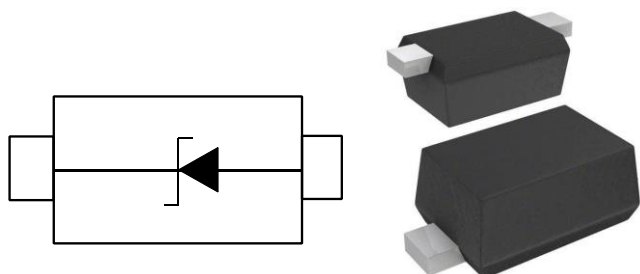
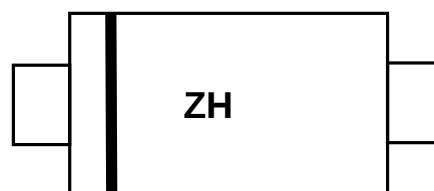
- Standard zener breakdown voltage range 5.1V
- Steady state power rating of 500mW
- ESD rating of class3(>16kV)per human body model
- RoHS compliant transient

Mechanical Characteristics

- Package: SOD-523
- 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**Pin configuration(Top view)****SOD-523****Marking Information**

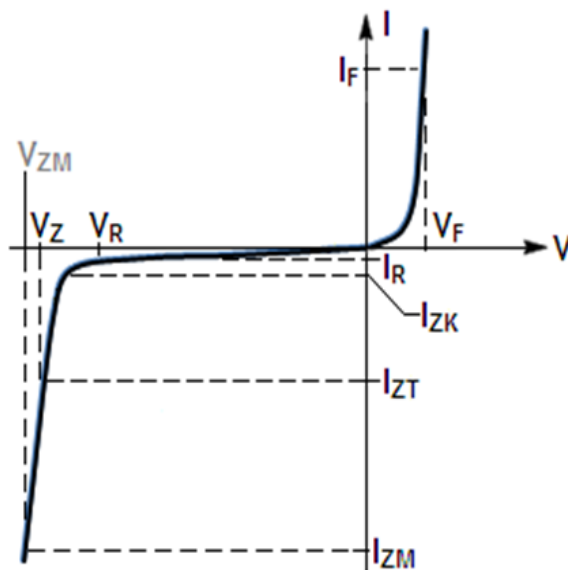
ZH = Device Making Code
Bar denotes cathode

Ordering Information

Part Number	Shipping	Reel Size
PZ04201D5	3000/Tape & Reel	7 inch

Electrical Characteristics ($T_A=25^{\circ}\text{C}$ 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($=I_{ZM}\times V_{ZM}$)
I_R	Reverse Leakage Current @ V_R
V_R	Reverse Voltage
I_F	Forward Current
V_F	Forward Voltage @ I_F



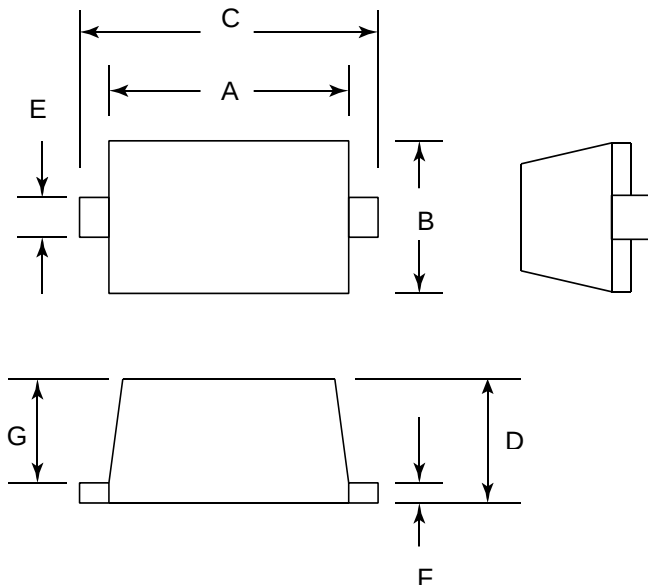
Maximum Ratings & Thermal Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

Items	Symbol	Value	Unit
Power dissipation	P_D	500	mW
Typical thermal resistance, junction to ambient ⁽¹⁾	$R_{\theta JA}$	340	$^{\circ}\text{C/W}$
Junction temperature	T_J	150	$^{\circ}\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}\text{C}$

Electrical Characteristics ($T_A = 25^{\circ}\text{C}$ unless otherwise noted)

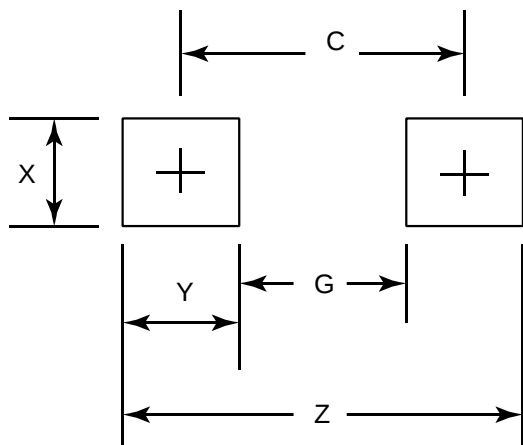
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Zener Voltage	V_Z	4.8	5.1	-	V	$I_{ZT}=5\text{mA}$
Maximum Zener Impedance	Z_{ZT}	-	-	50	Ω	$I_{ZT}=5\text{mA}$
Maximum Zener Impedance	Z_{ZK}	-	-	480	Ω	$I_{ZK}=1\text{mA}$
Reverse Leakage Current	I_R	-	-	20	μA	$V_R=4.2\text{V}$
Forward Voltage	V_F	-	-	1.25	V	$I_F=100\text{mA}$
Junction Capacitance			60	100	pF	$V_R = 0\text{V}$, $f = 1\text{MHz}$

SOD-523 Package Outline Drawing



SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	1.50	1.70	0.059	0.067
D	0.50	0.70	0.020	0.028
E	0.25	0.35	0.010	0.014
F	0.10	0.20	0.004	0.008
G	0.50	0.70	0.020	0.028

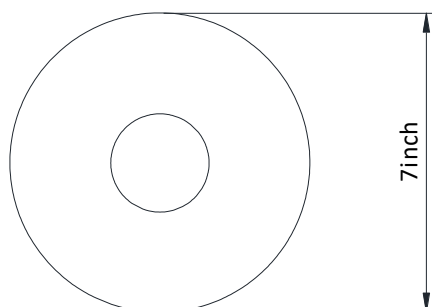
Suggested Land Pattern



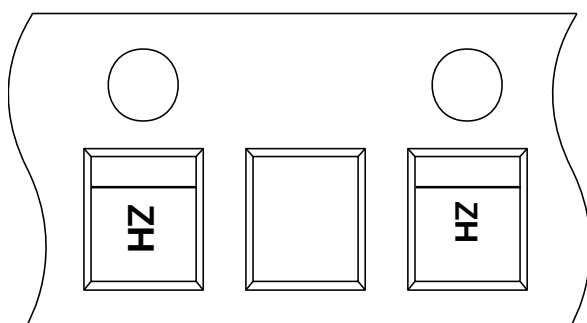
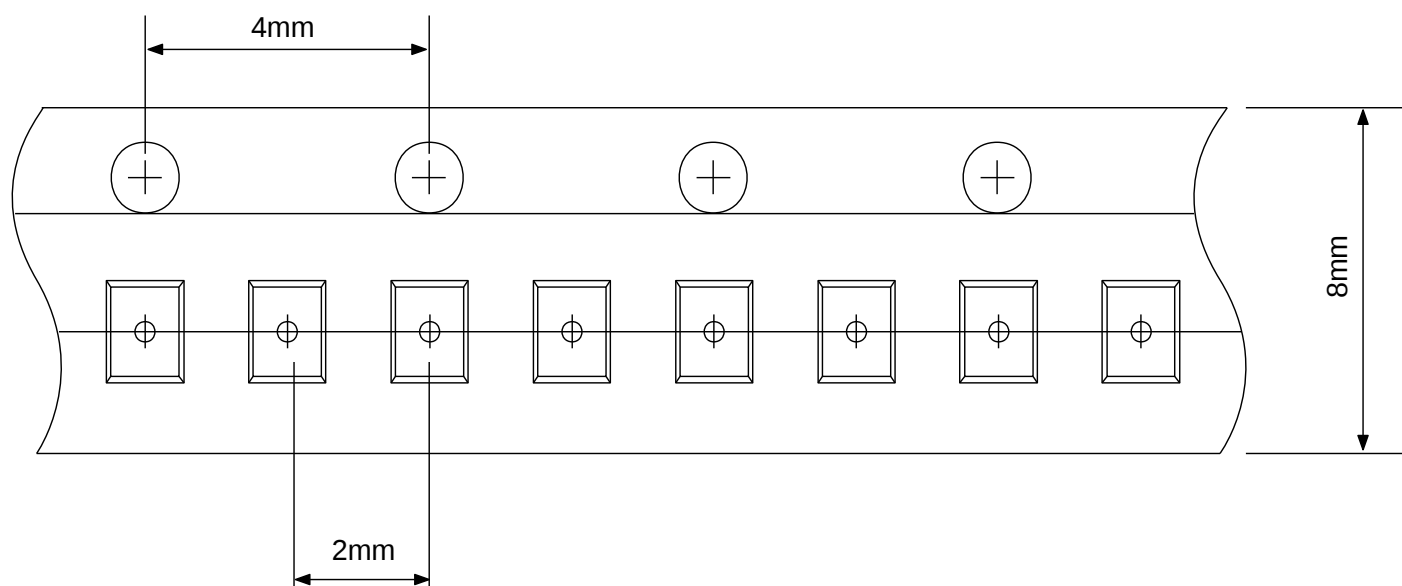
SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	1.70	0.067
G	1.10	0.043
X	0.80	0.031
Y	0.60	0.024
Z	2.30	0.091

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed

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