



500mW , SOD-523 Zener Diode

Description

The SZ04201D5 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

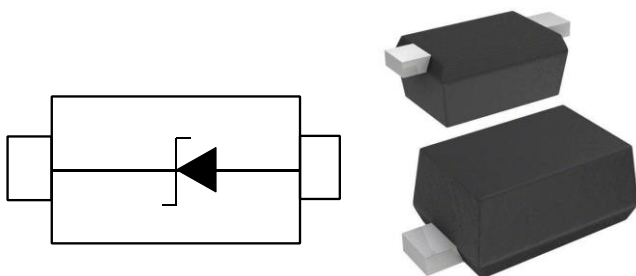
Mechanical Characteristics

- 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



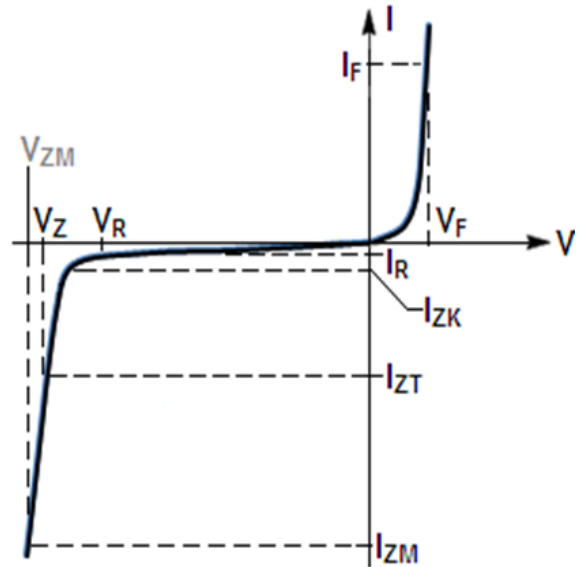
ZH = Device Making Code
Bar denotes cathode

Ordering Information

Part Number	Shipping	Reel Size
SZ04201D5	3000/Tape & Reel	7 inch

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

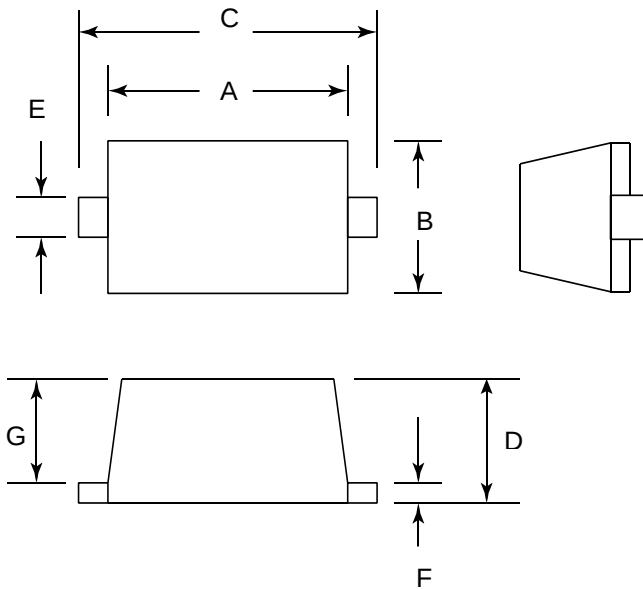
Symbol	Parameter
V _Z	Reverse Zener Voltage @ I _{ZT}
I _{ZT}	Zener (DC)current at specified test point
Z _{ZT}	Maximum Zener Impedance @ I _{ZT}
I _{ZK}	Zener (DC)current near breakdown knee
Z _{ZK}	Maximum Zener Impedance @ I _{ZK}
I _{ZM}	Maximum Zener current
V _{ZM}	Maximum Zener voltage
P _D	Maximum 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)**

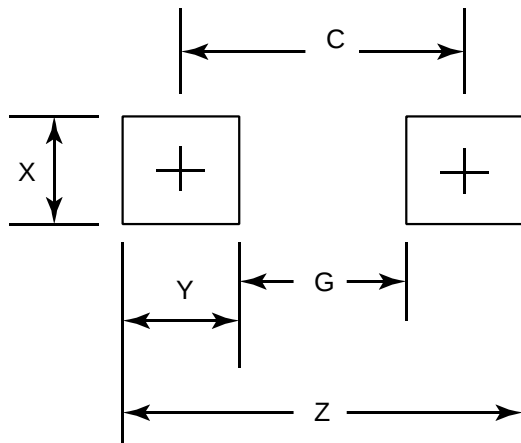
Items	Symbol	Value	Unit
Power dissipation	P _D	500	mW
Typical thermal resistance, junction to ambient ⁽¹⁾	R _{θJA}	340	°C/W
Junction temperature	T _J	150	°C
Storage temperature range	T _{STG}	–55 to +150	°C

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Reverse Zener Voltage	V _Z	4.8	5.1	-	V	I _{ZT} =5mA
Maximum Zener Impedance	Z _{ZT}	-	-	50	Ω	I _{ZT} =5mA
Maximum Zener Impedance	Z _{ZK}	-	-	480	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

SOD-523 Package Outline Drawing

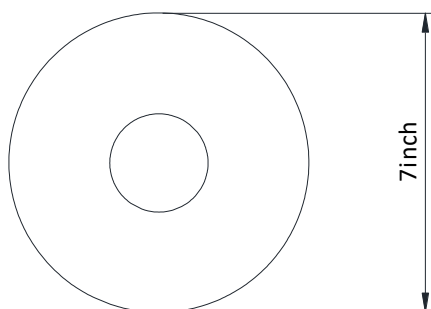
SYM	DIMENSIONS			
	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	1.10	1.30	0.043	0.051
B	0.70	0.90	0.028	0.035
C	1.50	1.70	0.059	0.067
D	0.50	0.70	0.020	0.028
E	0.25	0.35	0.010	0.014
F	0.10	0.20	0.004	0.008
G	0.50	0.70	0.020	0.028

Suggested Land Pattern

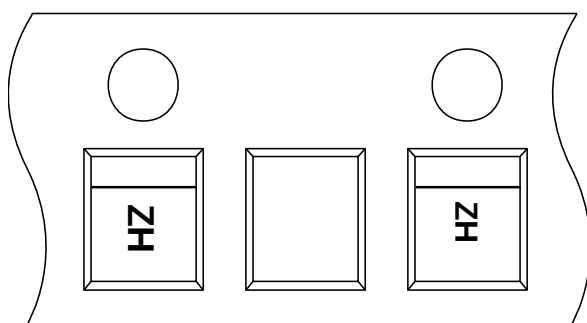
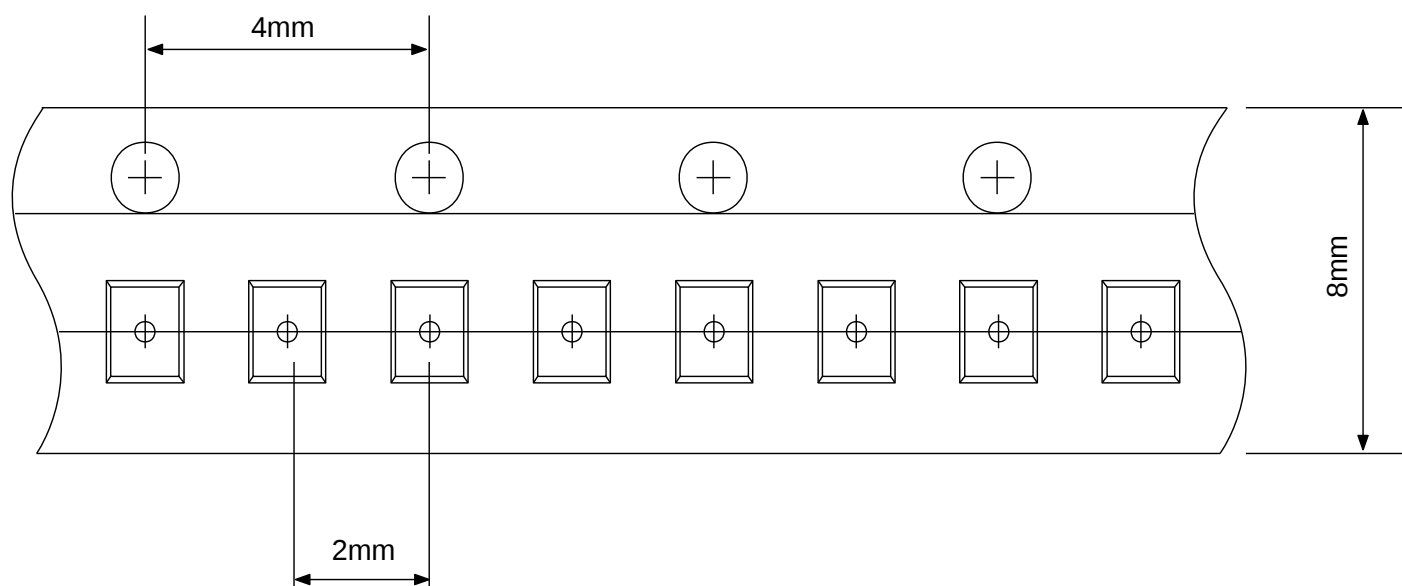
SYM	DIMENSIONS	
	MILLIMETERS	INCHES
C	1.70	0.067
G	1.10	0.043
X	0.80	0.031
Y	0.60	0.024
Z	2.30	0.091

TAPE AND REEL INFORMATION

Reel Dimensions



Tape Dimensions



User Direction of Feed