

Zener Diode

unit : mm

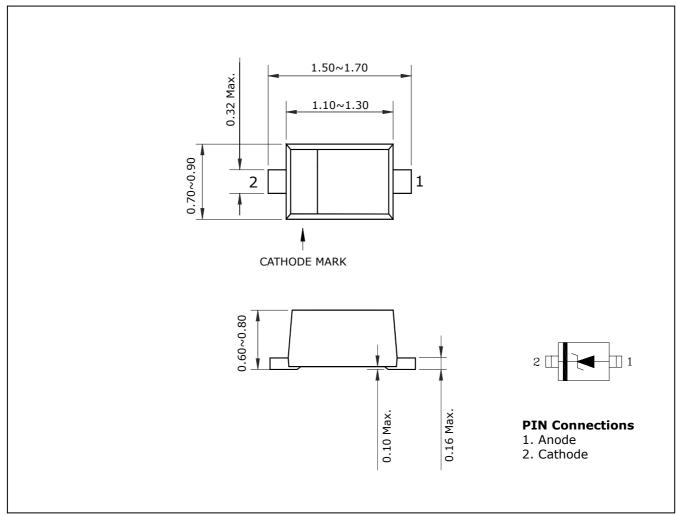
#### Features

- Compact type
- $\bullet$  Radiation size 1.25mm  $\times$  1.7mm
- Surface mount lead configuration

### **Ordering Information**

| Type NO. Marking |    | Package Code |  |  |
|------------------|----|--------------|--|--|
| SDZ5V1Q          | Z2 | SOD-523      |  |  |

### **Outline Dimensions**



# SDZ5V1Q

### **Absolute Maximum Ratings**

| Absolute Maximum Ratings (Ta |                  |         |      |  |  |
|------------------------------|------------------|---------|------|--|--|
| Characteristic               | Symbol           | Ratings | Unit |  |  |
| Power dissipation            | P <sub>D</sub>   | 150     | mW   |  |  |
| Junction temperature         | Tյ               | 150     | °C   |  |  |
| Storage temperature range    | T <sub>stg</sub> | -55~150 | °C   |  |  |

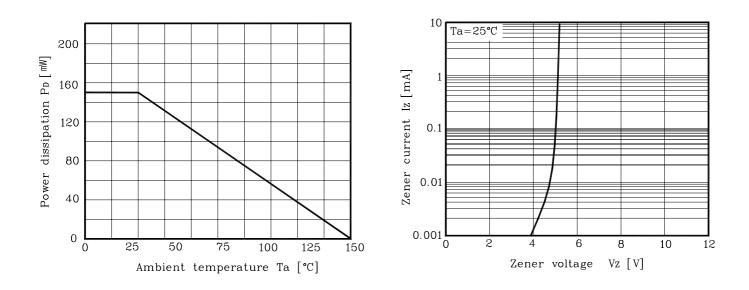
### **Electrical Characteristics**

| Electrical Characteristics (Ta=25°C) |                 |                        |      |      |      |      |  |
|--------------------------------------|-----------------|------------------------|------|------|------|------|--|
| Characteristic                       | Symbol          | <b>Test Condition</b>  | Min. | Тур. | Max. | Unit |  |
| Zener voltage                        | Vz              | I <sub>Z</sub> =5mA    | 4.88 | -    | 5.32 | V    |  |
| Dynamic impedance                    | Z <sub>ZT</sub> | I <sub>Z</sub> =5mA    | -    | -    | 70   | Ω    |  |
| KNEE dynamic impedance               | Z <sub>ZK</sub> | I <sub>z</sub> =0.25mA | -    | -    | 2050 | Ω    |  |
| Reverse current                      | I <sub>R</sub>  | V <sub>R</sub> =2V     | -    | -    | 2    | μA   |  |

## SDZ5V1Q

Fig. 1 P<sub>D-</sub>T<sub>a</sub>

Fig. 2  $I_{Z}$ - $V_{Z}$ 



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