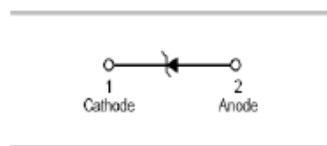


## Plastic-Encapsulate Diodes

**ESD5V0D5**

### FEATURES

- Reverse working(Stand-off) voltages:5.0V.
- Low leakage.
- Response time is typically<1ns.
- ESD Rating of Class 3(>16kV) per Human Body Model.
- IEC61000-4-2Level 4ESD Protection.



**SOD-523**

### APPLICATIONS

- Designed to protect voltage sensitive components  
From ESD and transient.

### ORDERING INFORMATION

| Type No. | Marking | Package Code |
|----------|---------|--------------|
| ESD5V0D5 | ZF      | SOD-523      |

### MAXIMUM RATING @ Ta=25°C unless otherwise specified

| Parameter                                             | Symbol                            | Limits     | Unit    |
|-------------------------------------------------------|-----------------------------------|------------|---------|
| IEC 61000-4-2 (ESD) Air Contanct                      |                                   | ± 30       | kV      |
| ESD voltage per human body model<br>per machine model |                                   | 16<br>400  | kV<br>V |
| Total power dissipation on FR-5 board(Note 1)         | P <sub>D</sub>                    | 150        | mW      |
| Junction and Storage temperature range                | T <sub>j</sub> , T <sub>stg</sub> | -55 to+150 | °C      |
| Thermal Resistance Junction-to Ambient                | R <sub>ΘJA</sub>                  | 833        | °C/W    |
| Lead solder temperature range<br>(10 Second Duration) | T <sub>L</sub>                    | 260        | °C      |

Note 1.FR-5=1.0\*0.75\*0.62in

## ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

| Device    | Device Marking | $V_{RWM}$<br>(V) | $I_R(\mu A)$<br>@ $V_{RWM}$ | $V_{BR}(V)$<br>@ $I_T$ |      | $I_T$ | $V_C@$<br>$I_{PP}=5A$ | $I_{PP}$ | $V_C@$<br>Max $I_{PP}$ | $P_{PK}$ | $C(pF)$ |
|-----------|----------------|------------------|-----------------------------|------------------------|------|-------|-----------------------|----------|------------------------|----------|---------|
|           |                | Max.             | Max.                        | Min.                   | Max. | mA    | V                     | A        | V                      | W        | pF      |
| GESD5V0D5 | ZF             | 5.0              | 0.08                        | 6.2                    | 7.3  | 1.0   | 11.6                  | 9.4      | 18.6                   | 174      | 80      |

## TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

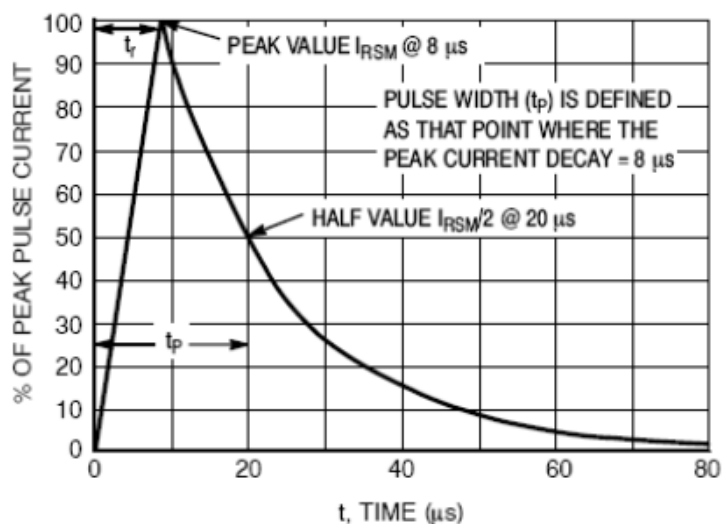


Figure 1. 8 x 20  $\mu s$  Pulse Waveform

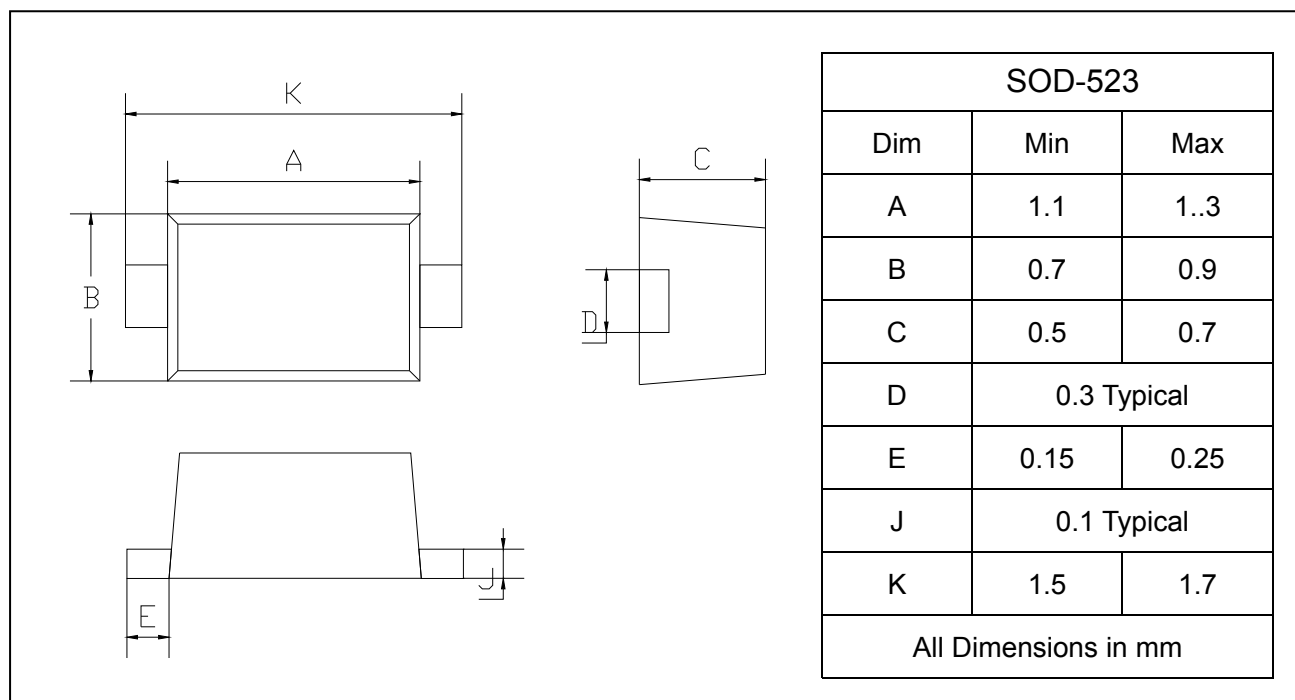
## Plastic-Encapsulate Diodes

**ESD5V0D5**

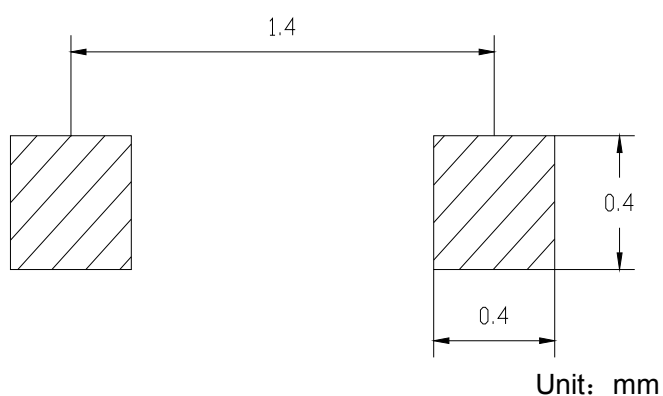
### PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



### SOLDERING FOOTPRINT



### PACKAGE INFORMATION

| Device   | Package | Shipping       |
|----------|---------|----------------|
| ESD5V0D5 | SOD-523 | 3000/Tape&Reel |