# ESD Protection diode

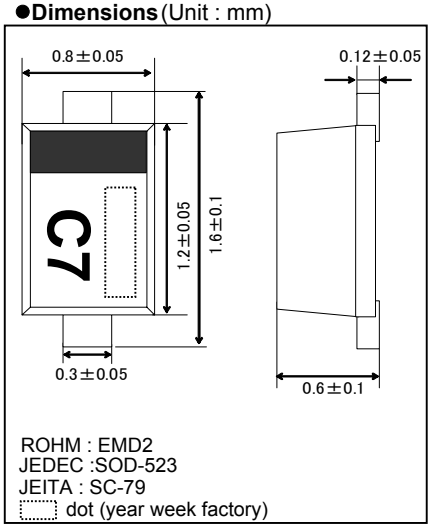
## RSB5.6S

●**Applications**
ESD Protection

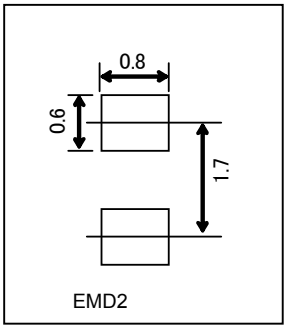
●**Features**
1) Ultra small mold type. (EMD2)
2) Bi direction high reliability.
3) Bi chip-mounter, automatic mounting is possible.

●**Construction**
Silicon epitaxial planar

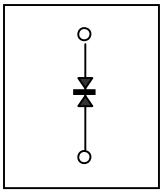
●**Dimensions** (Unit : mm)



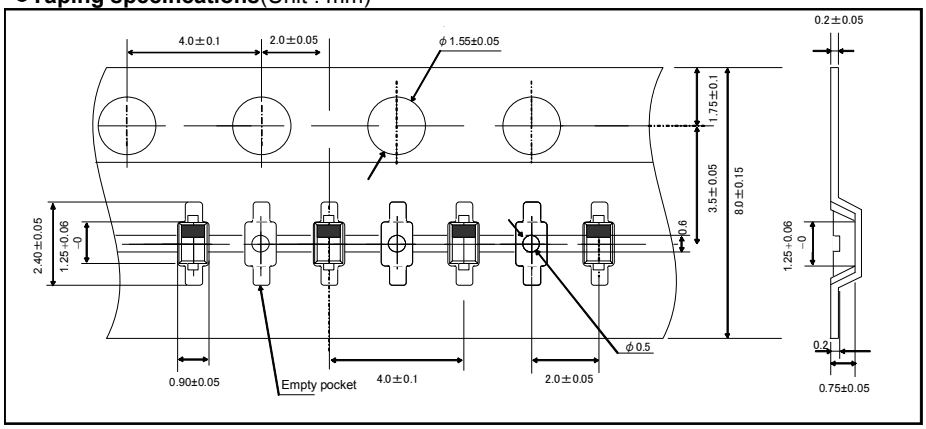

●**Land size figure** (Unit : mm)




●**Structure**



●**Taping specifications** (Unit : mm)




●**Absolute maximum ratings** (Ta=25°C)

| Parameter | Symbol | Limits | Unit |
|---|---|---|---|
| Peak Pulse Power (tp=10×1000μs) | Ppk | 10 | W |
| Power dissipation | P | 150 | mW |
| Junction temperature | Tj | 150 | °C |
| Storage temperature | Tstg | -55 to +150 | °C |
| Operating temperature range | Topr | -55 to +150 | °C |

●**Electrical characteristics** (Ta=25°C)

| Parameter | Symbol | Min. | Max. | Unit | Conditions |
|---|---|---|---|---|---|
| Zener voltage | $V_z$ | 4.760 | 6.440 | V | $I_Z$=1mA |
| Reverse current | $I_R$ | - | 1.0 | μA | $V_R$=2.5V |

∗ Zener voltage to be measured at 40ms after current starting to apply.

## Notes

No copying or reproduction of this document, in part or in whole, is permitted without the consent of ROHM Co.,Ltd.

The content specified herein is subject to change for improvement without notice.

The content specified herein is for the purpose of introducing ROHM's products (hereinafter "Products"). If you wish to use any such Product, please be sure to refer to the specifications, which can be obtained from ROHM upon request.

Examples of application circuits, circuit constants and any other information contained herein illustrate the standard usage and operations of the Products. The peripheral conditions must be taken into account when designing circuits for mass production.

Great care was taken in ensuring the accuracy of the information specified in this document. However, should you incur any damage arising from any inaccuracy or misprint of such information, ROHM shall bear no responsibility for such damage.

The technical information specified herein is intended only to show the typical functions of and examples of application circuits for the Products. ROHM does not grant you, explicitly or implicitly, any license to use or exercise intellectual property or other rights held by ROHM and other parties. ROHM shall bear no responsibility whatsoever for any dispute arising from the use of such technical information.

The Products specified in this document are intended to be used with general-use electronic equipment or devices (such as audio visual equipment, office-automation equipment, communication devices, electronic appliances and amusement devices).

The Products specified in this document are not designed to be radiation tolerant.

While ROHM always makes efforts to enhance the quality and reliability of its Products, a Product may fail or malfunction for a variety of reasons.

Please be sure to implement in your equipment using the Products safety measures to guard against the possibility of physical injury, fire or any other damage caused in the event of the failure of any Product, such as derating, redundancy, fire control and fail-safe designs. ROHM shall bear no responsibility whatsoever for your use of any Product outside of the prescribed scope or not in accordance with the instruction manual.

The Products are not designed or manufactured to be used with any equipment, device or system which requires an extremely high level of reliability the failure or malfunction of which may result in a direct threat to human life or create a risk of human injury (such as a medical instrument, transportation equipment, aerospace machinery, nuclear-reactor controller, fuel-controller or other safety device). ROHM shall bear no responsibility in any way for use of any of the Products for the above special purposes. If a Product is intended to be used for any such special purpose, please contact a ROHM sales representative before purchasing.

If you intend to export or ship overseas any Product or technology specified herein that may be controlled under the Foreign Exchange and the Foreign Trade Law, you will be required to obtain a license or permit under the Law.

ROHM SEMICONDUCTOR

Thank you for your accessing to ROHM product informations.
More detail product informations and catalogs are available, please contact us.

ROHM Customer Support System

http://www.rohm.com/contact/

ICs
Discrete Semiconductors
Transistors
Diodes
Schottky Barrier Diodes
Rectifier Diodes
Fast Recovery Diodes
Zener Diodes
Switching Diodes
Band Switching Diodes
PIN Diodes
Detection Schottky Diodes
JEDEC Standard & Euro Standard Diodes
SiC Power Devices
Opto Electronics
Passive Components
Modules (Sub Systems)



# Bi-directional zener diodes

**RSB5.6S**

Inquiries concerning our products

**Data Sheet**

Data Sheet (1005K)

Distribution Inventory

**Technical Data**

| | |
|---|---|
| Spice Model(lib) | Thermal Model(lib) |
| Reliability information | Condition of soldering |
| Storage conditions | Taping specifications |
| Part No. explanation | Operation notes |
| RoHS | |

Print out

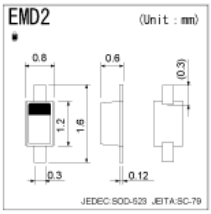
[ Product description ]

ROHM's zener diodes are available in various lineup as 2-pin mold surfacemount type and complex type.

**Outline**

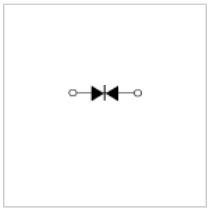
1.6x0.8(t=0.6)

**Dimensions**




* Click to enlarge.

**Equivalent circuit diagram**



## Features

• This zener diode absorbs both plus and minus surge in one package, and are suitable for various signal lines fromconsumer appliances to automotives.
• Bi-directional zener diodes.

## Product specifications

| Absolute maximum ratings (Ta=25ºC) | | |
|---|---|---|
| Rated parameters | Standard value | Conditions |
| Peak pulse power Ppk_1 | - | |
| Peak pulse power Ppk_2 | - | |
| Stand-off voltage $V_{RMN}$ | - | |
| Power dissipation $P_D$(mW) | 150 | |
| Junction temperature Tj(ºC) | 150 | |
| Storage temperature Tstg(ºC) | -55 to +150 | |
| Operating temperature Topr(ºC) | -55 to +150 | |

*The contents described here are just outline for introduction.

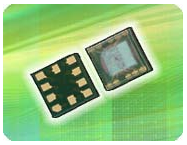
Please obtain the specification sheets from us for thorough check before use.

## Status Product

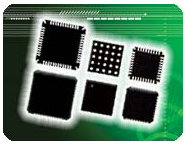
| Part No. | Package | Status * | RoHS | Packing style | Package quantity | Sales | Distribution Inventory |
|---|---|---|---|---|---|---|---|
| RSB5.6STE61 | EMD2/SOD-523/SC-79 @ROHM/JEDEC/JEITA | Active | Yes | Taping | 3000 | Inquiry | Purchase |

* Active: Production or current type Preparation: Preliminary type Preview: Development type

## Customers who viewed this product also viewed



Smart display control with new touchless motion function BH1771GLC



**ROHM Develops New Motor Driver LSI. Part offers wide range of operating voltages and industry's shortest turn-on times in a**


Because the series had been added, it became easy to use. LSI Quick Search

Diodes

**2011.07.13**
ROHM's fast recovery diodes offer high efficiency with low noise

**2010.05.10**
Low Drive Voltage High Efficiency SiC Schottky Barrier Diodes

What is a diode?

Quality and Reliability
Part No. explanation
Packaging specifications
Mounting and storage conditions
Products information
FAQ
RoHS directive compliance
Contact us