# 40V 2.0A 28V Schottky Barrier Rectifiers with 50A Ifsm 3000pcs Spq -50- 125.C Operating Temperature

### **Basic Information**

• Place of Origin: GUANGDONG, China

Brand Name: SocayModel Number: SBD204D1



## **Product Specification**

Ifsm: 50AVdc: 40V

• Operating Temperature: -50-+125°C

Maximum Average 2.0A
Forward Rectified

Current:

• Storage Temperature -50-+150°C

Range:

Spq: 3000pcsThermal Resistance: 85 /WMaximum RMS Voltage: 28V

• Highlight: 3000pcs Spq Schottky Barrier Rectifiers,

50A Ifsm Schottky Barrier Rectifiers, 2.0A Schottky Barrier Rectifiers

#### **Product Description:**

The Schottky Barrier Diode is able to operate in a wide range of different temperatures, making it ideal for use in a variety of different environments. With a storage temperature range of -50-+150°C, this diode is able to withstand extreme temperatures and maintain its functionality. The operating temperature range of the diode is also wide, ranging from -50-+125°C, making it ideal for use in a range of

In addition to its temperature range, the Schottky Barrier Diode also has a maximum RMS voltage of 28V. This means that it is able to handle a wide range of different voltage levels, making it ideal for use in a variety of different applications. Whether you are using it in a power supply or in a motor control circuit, this diode is able to provide stable and reliable performance.

The Schottky Barrier Diode also has an impressive Ifsm of 50A. This means that it is able to handle high levels of current, making it ideal for use in a range of different applications. Whether you are using it in a power supply or in a motor control circuit, this diode is able to provide stable and reliable performance.

Overall, the Schottky Barrier Diode is a high-quality diode that is suitable for a wide range of different applications. With its surface mounted design and impressive performance specifications, this diode is ideal for use in a range of different environments. Whether you are building a new circuit or upgrading an existing one, the Schottky Barrier Diode is sure to provide the stable and reliable performance

#### Features:

Product Name: Schottky Barrier Diode

Surface mounted Diode Diode Electronic Component Thermal Resistance: 85 /W

Ifsm: 50A Spg: 3000pcs

Maximum Average Forward Rectified Current: 2.0A

Maximum RMS Voltage: 28V Low Voltage Rectifier Diode

#### **Applications:**

The Socay SBD204D1 is a surface mount Schottky barrier rectifier that is widely used in various electronic applications. Its thermal resistance of 85 /W ensures that it can withstand high operating temperatures, making it suitable for use in industrial and automotive

One of the main application scenarios for the SBD204D1 is in power supplies, where it can be used to rectify AC voltage to DC voltage. Its maximum forward voltage of 0.55V at IF=2A ensures that it has a low voltage drop, resulting in higher efficiency. Additionally, its maximum RMS voltage of 28V means that it can handle relatively high voltages, making it ideal for use in power supplies that require rectification of higher voltage levels.

Another common application of the Socay SBD204D1 is in battery charging circuits. Its low forward voltage drop and high efficiency make it an ideal choice for use in battery charging circuits, where it can help to reduce power losses and improve overall system efficiency. Additionally, its surface mount package makes it easy to integrate into compact circuit designs.

The SBD204D1 can also be used in voltage regulation circuits, where it can help to stabilize the output voltage and prevent voltage spikes. Its fast switching speed and low reverse recovery time ensure that it can respond quickly to changes in the input voltage, making it a reliable and efficient choice for voltage regulation circuits.

Other application occasions where the Socay SBD204D1 can be used include LED lighting, motor control circuits, and DC-DC converters. Its small form factor and surface mount package make it easy to integrate into a wide range of electronic systems and devices. In summary, the Socay SBD204D1 is a versatile surface mounted diode that can be used in a wide range of electronic applications. Its low forward voltage drop, high efficiency, and fast switching speed make it an ideal choice for power supplies, battery charging circuits, voltage regulation circuits, and more. With its high-quality construction and reliable performance, the SBD204D1 is an excellent choice for engineers and designers who need a high-quality Schottky barrier diode for their electronic designs.

#### **Support and Services:**

The Schottky Barrier Diode product provides the following technical support and services:

- Technical data sheets and application notes
- Design and simulation tools
- Technical training and webinars
- Customized solutions and product modifications
- Failure analysis and reliability testing
- Environmental compliance and material declaration
- Product documentation and software drivers

#### FAQ:

Q1: What is the brand name of this Schottky Barrier Diode?

A1: The brand name of this Schottky Barrier Diode is Socay.

Q2: What is the model number of this Schottky Barrier Diode? A2: The model number of this Schottky Barrier Diode is SBD204D1.

Q3: Where is this Schottky Barrier Diode manufactured?

A3: This Schottky Barrier Diode is manufactured in GUANGDONG, China.

Q4: What are the electrical characteristics of this Schottky Barrier Diode?

A4: The electrical characteristics of this Schottky Barrier Diode include a maximum average forward current of 2A, a maximum peak reverse voltage of 40V, and a typical forward voltage drop of 0.38V at 1A.

Q5: What are the typical applications of this Schottky Barrier Diode?

A5: This Schottky Barrier Diode can be used in various applications such as power rectification, voltage clamping, and reverse polarity protection in electronic circuits.

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