SOCAY SS14A Schottky Barrier Diode VRRM 40V VRMS 28V SMD SBD

Basic Information

• Place of Origin: Shenzhen, Guangdong, China

• Brand Name: SOCAY

• Certification: REACH,RoHS,ISO

Model Number: SS14A
 Minimum Order Quantity: 5000PCS
 Price: Negotiable
 Delivery Time: 5-8 work days



Product Specification

Name: Schottky Barrier DiodePackage Type: DO-214AC(SMA)

Maximum Repetitive Peak 40V
 Payaras Valtaras

Reverse Voltage:

Maximum RMS Voltage: 28VMaximum DC Blocking 40V Voltage:

 Maximum Average Forward 1A Rectified Current:

Peak Forward Surge 40A

Current:

• Thermal Resistance: 35 /W

Product Description

SOCAY SS14A Schottky Barrier Diode VRRM 40V VRMS 28V SMD SBD

SBD DATASHEET: SS12A~SS120A(SMA)_v2211.1.pdf

SBD SS14A Characteristics:

SBD is a low profile package
It is deal for automated placement
It owns ultrafast reverse recovery time
Very low power losses and very high efficiency
SBD SS14A has low forward voltage drop
Excellent High surge capability
Excellent High temperature soldering:

260 /10 seconds at terminals

Component in accordance to RoHS 2002/95/1 and WEEE 2002/96/EC

SBD SS14A Mechanical Data:

SS14A Case: JEDEC DO-214AC molded plastic

The Product's Terminals: Solder plated, solderable per J-STD-002B and JESD22-B102D

SS14A's Polarity: Laser band denotes cathode end

SBD SS14A Main Ratings and Features:

| SBD I _{F(AV)} | 1.0A |
|------------------------|----------------------------------|
| SBD V _{RRM} | 40 V |
| I _{FSM} | 40A |
| V _F | 0.50V, 0.55V, 0.70V, 0.85V,0.95V |
| T _{j max.} | 125 |

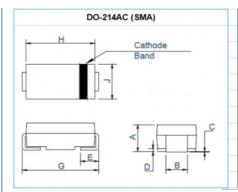
SBD SS14A Maximum Ratings & Thermal Characteristics ($T_A = 25$ unless otherwise noted):

| Items | Symb ol | I - | 12 | 1 - | 1 | SS16 A | | | SS11 5A | SS120 A | Unit |
|--|--------------------------------------|-------------|---------|----------------|--------|-----------|--------|--------|------------|------------|------|
| SBD Max. Vrrm | V_{RRM} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| SBD Max. Vrms | V _{RMS} | 14 | 21 | 28 | 35 | 42 | 56 | 70 | 105 | 140 | V |
| Max. Vdc | V_{DC} | 20 | 30 | 40 | 50 | 60 | 80 | 100 | 150 | 200 | V |
| SBD Max. If(av) | I _{F(AV)} | 1 | 1 | | | | | | | Α | |
| SBD Peak forward surge current | I _{FSM} | 40 | 40 | | | | | | | A | |
| SBD Voltage rate of change | l . | 10000 | | | | | | | V/µs | | |
| SBD Thermal resistance | $R_{\theta JL}$ | 35 | | | | | | | | | /W |
| SBD Operating junction and storage temperature range | T _J ,T _{ST} G | -65 to +125 | | | | | | | | | |
| Note 1: Mounted on | P.C.B. | with 0 | 2 x 0.2 | ?" <i>(5.0</i> | x 5.0n | nm) co | pper p | ad are | as. | | |

SBD SS14A Electrical Characteristics ($T_A = 25$ unless otherwise noted):

| SBD Items | SBD Te | st conditio | nsSymbol | SS12A | SS13A~ SS14A | SS15A~ SS16A | SS18A~ SS110A | SS115A~ SS120A | Unit |
|---|---------|-------------|----------|-------|-----------------|-----------------|------------------|-------------------|------|
| Instantaneous Vf | IF=1.0A | (2) | VF | 0.50 | 0.55 | 0.70 | 0.85 | 0.95 | V |
| SBD Ir | VR=VD0 | C Tj=25 | IR | 0.5 | | | | | mΑ |
| | | Tj=100 | | 5.0 | | | | | |
| Note 2: Pulse test:300µs pulse width,1% duty cycle. | | | | | | | | | |

SBD SS14A Dimensions:



| Dimensions | | | | | | | | |
|------------|-------|-------|-------------|------|--|--|--|--|
| Dim | Inc | hes | Millimeters | | | | | |
| | Min | Max | Min | Max | | | | |
| Α | 0.067 | 0.093 | 1.7 | 2.36 | | | | |
| В | 0.049 | 0.067 | 1.25 | 1.7 | | | | |
| С | 0.002 | 0.008 | 0.05 | 0.2 | | | | |
| D | | 0.02 | _ | 0.51 | | | | |
| Е | 0.03 | 0.06 | 0.76 | 1.52 | | | | |
| G | 0.185 | 0.209 | 4.7 | 5.31 | | | | |
| Н | 0.157 | 0.185 | 4 | 4.7 | | | | |
| J | 0.086 | 0.11 | 2.18 | 2.8 | | | | |

SBD SS14A Notice:

SBD SS14A is intended for use in general electronics applications.

SS14A should be worked less than the ratings; if it is exceeded, it may cause permanent damage,or introduce latent failure mechanisms. So, be careful

The absolute maximum ratings are rated values and must not be exceeded during operation. The following are the general derating methods you design a circuit with a device.

 $I_{F(\text{AV})}$: The worst case current be no greater than 80% . It is very important.

I_{FSM}: This rating specifies the non-repetitive peak current. This is only applied for an abnormal operation, which the general during the lifespan of the device.

T_J: Derate this rating when using a device in order to ensure high reliability. We recommend that the device should be used at a T_J of below 100.







Socay Shenzhen Socay Electronics Co., Ltd.







