

# **DESCRIPTION**

The RB050L-40 is available in SMA package

## ORDERING INFORMATION

Package Type	Part Number
SMA	RB050L-40
Note	SPQ: 1,500pcs/Tape
AiT provides all RoHS Compliant Products	

## **FEATURES**

- Low Forward Voltage Drop
- High Current Capability
- High temperature Soldering guaranteed:
  250°C/10 seconds, 0.375" (9.5mm) lead length,
  5lbs. (2.3kg) tension
- Available in SMA package

## **MECHANICAL DATA**

Terminals: Plated axial leads

Polarity: Color band denotes cathode end

Mounting Position: Any

REV1.0 - APR 2015 RELEASED - -1

# MAXIMUM RATINGS AND THERMAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Tatings at 20 0 ambient temperature unless otherwise specified.	
V <sub>RRM</sub> , Maximum Repetitive Peak Reverse Voltage	40V
V <sub>R(RMS)</sub> , Maximum RMS Voltage	28V
V <sub>DC</sub> , Maximum DC Blocking Voltage	40V
I <sub>FM</sub> , Maximum Average Forward Rectified Current	3.0A
V <sub>F</sub> , Maximum Forward Voltage @I <sub>F</sub> =3.0A	0.55V
I <sub>FSM</sub> , Peak Forward Surge Current 8.3 ms Single Half Sine-Wave	100A
I <sub>R</sub> , Maximum Reverse Current @T <sub>A</sub> =25°C	0.5mA
R <sub>0JA</sub> , Typical Thermal Resistance	75°C/W
C <sub>J</sub> , Type Junction Capacitance V <sub>R</sub> =4.0V f=1.0MHz	60pF
T <sub>J</sub> , T <sub>STG</sub> , Operating Junction and Storage Temperature Range	-50°C~+150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

REV1.0 - APR 2015 RELEASED - - 2 -

### TYPICAL CHARACTERISTICS

Figure 1. Typical Forward Characteristic

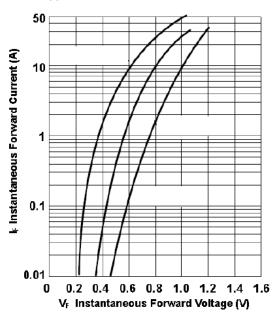


Figure 3. Maximum Non Repetitive Peak Forward Surge Current

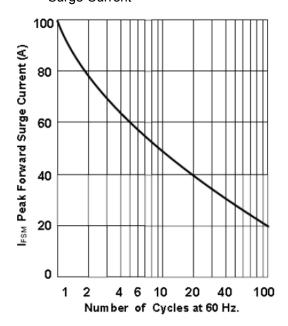


Figure 2. Forward Current Derating Curve

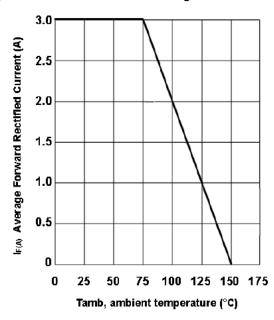
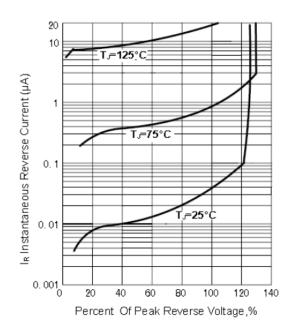


Figure 4. Typical Reverse Characteristics

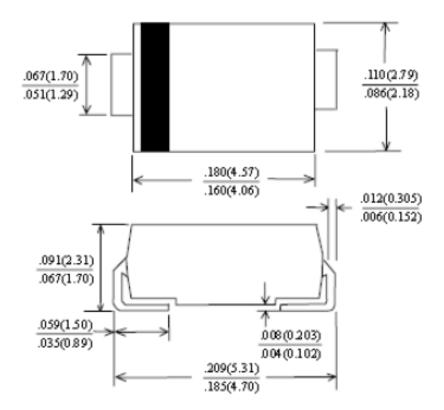


REV1.0 - APR 2015 RELEASED - - 3 -

# PACKAGE INFORMATION

Dimension in SMA Package

Unit: Inch(mm)



REV1.0 - APR 2015 RELEASED - - 4 -



### IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or servere property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.

REV1.0 - APR 2015 RELEASED - - 5 -