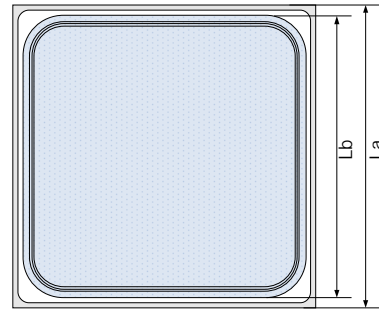


**2SB166100MA LOW IR SCHOTTKY BARRIER DIODE CHIPS**
**DESCRIPTION**

- Ø 2SB166100MA is a schottky barrier diode chips fabricated in silicon epitaxial planar technology;
- Ø Due to special schottky barrier structure, the chips have very low reverse leakage current ( typical  $I_R=0.002mA@ V_r=100V$  ) and maximum 150°C operation junction temperature;
- Ø Low power losses, high efficiency;
- Ø Guard ring construction for transient protection;
- Ø High ESD capability;
- Ø High surge capability;
- Ø Packaged products are widely used in switching power suppliers, polarity protection circuits and other electronic circuits;
- Ø Chip Size: 1660 $\mu$ m X 1660 $\mu$ m;
- Ø Chip Thickness: 280 $\pm$ 20 $\mu$ m;
- Ø Have two top side electrode materials for customer to choose, detail refer to ordering specifications.


**Chip Topography and Dimensions**

La: Chip Size: 1660mm;

Lb: Pad Size: 1565mm;

**ORDERING SPECIFICATIONS**

Product Name	Specification
2SB166100MAYY	For Axial leads package
2SB166100MAYL	For Au and AlSi wire bonding package

**ABSOLUTE MAXIMUM RATINGS**

Parameters	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	VRRM	100	V
Average Forward Rectified Current	IFAV	5	A
Peak Forward Surge Current@8.3ms	IFSM	150	A
Maximum Operation Junction Temperature	TJ	150	°C
Storage Temperature Range	TSTG	-40~150	°C

**ELECTRICAL CHARACTERISTICS (Tamb=25°C)**

Parameters	Symbol	Test Conditions	Min.	Max.	Unit
Reverse Voltage	VBR	IR=0.5mA	100	--	V
Forward Voltage	VF	IF=5A	--	0.85	V
Reverse Current	IR	VR=100V	--	0.5	mA