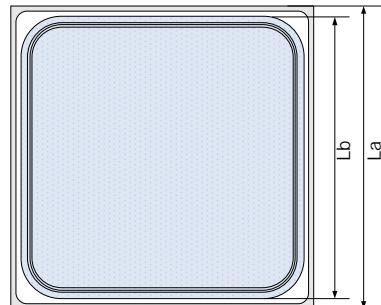


## 2SB139100MA LOW IR SCHOTTKY BARRIER DIODE CHIPS

### DESCRIPTION

- Ø 2SB139100MA 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  $I_R=0.002\text{mA}$  @  $V_R=100\text{V}$  ) and maximum  $150^\circ\text{C}$  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:  $1390\mu\text{m} \times 1390\mu\text{m}$ ;
- Ø Chip Thickness:  $280\pm20\mu\text{m}$ ;



Chip Topography and Dimensions

La: Chip Size:  $1.390\text{mm}$ ;

Lb: Pad Size:  $1.295\text{mm}$ ;

### ORDERING SPECIFICATIONS

Product Name	Specification
2SB139100MAYY	For Axial leads package

### ABSOLUTE MAXIMUM RATINGS

Parameters	Symbol	Ratings	Unit
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	100	V
Average Forward Rectified Current	$I_{FAV}$	3	A
Peak Forward Surge Current@8.3ms	$I_{FSM}$	80	A
Maximum Operation Junction Temperature	$T_J$	150	$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-40~150	$^\circ\text{C}$

### ELECTRICAL CHARACTERISTICS ( $T_{amb}=25^\circ\text{C}$ )

Parameters	Symbol	Test Conditions	Min.	Max.	Unit
Reverse Voltage	$V_{BR}$	$I_R=0.5\text{mA}$	100	--	V
Forward Voltage	$V_F$	$I_F=3\text{A}$	--	0.85	V
Reverse Current	$I_R$	$V_R=100\text{V}$	--	0.5	mA