

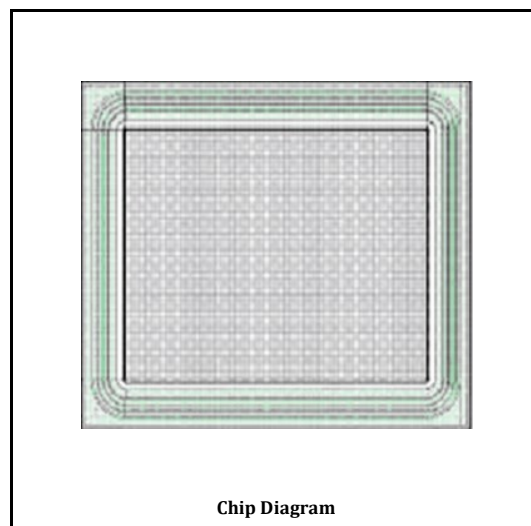
### PRODUCT FEATURES

- ◆Fast Recovery Time
- ◆Soft Recovery Characteristics
- ◆Low Forward Voltage
- ◆Low Leakage Current
- ◆Low Recovery Loss

### Applications (not limited to)

- ◆Freewheeling, Snubber, Clamp
- ◆Snubber Diode
- ◆Switch Power Supplies
- ◆Motor control
- ◆Inverters, Converters

Items	Description
Wafer Size	5 Inch
Gross Die	4650 EA
Top Metal	Al or Ag
Back Metal	Ag
Dimensions	um
Chip Size	1500um * 1500um
Pad Size	970 um * 970 um
Wafer Thickness	260±20um
Scribe Line width	30 um
Bonding Wire (In case top metal=Al)	Al, 12mil*1



### Absolute Maximum ratings (T<sub>a</sub>=25℃)

Parameter	Symbol	Value	Units
DC Blocking Voltage	V <sub>RRM</sub>	600	V
Average Rectified Forward Current	I <sub>FAV</sub>	5	A
Nonrepetitive Peak Surge Current@8.3mS	I <sub>FSM</sub>	60	A
Operating Junction Temperature	T <sub>j</sub>	175	℃
Storage Temperature	T <sub>STG</sub>	- 55~150	℃

### Electrical specification (T<sub>a</sub>=25℃)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	V <sub>BR</sub>	I <sub>R</sub> =50μA	600	670	-	V
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =5A, T <sub>a</sub> =25℃	-	1.30	1.55	V
		I <sub>F</sub> =5A, T <sub>a</sub> =125℃	-	1.20	1.45	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =600V, T <sub>a</sub> =25℃	-	-	2	μA
		V <sub>R</sub> =600V, T <sub>a</sub> =125℃	-	2	-	μA
Reverse Recovery Time	T <sub>rr</sub>	I <sub>F</sub> =0.5A, I <sub>R</sub> =1A, I <sub>rr</sub> =0.25A	-	24	35	ns
		I <sub>F</sub> =1A, V <sub>R</sub> =30V, di/dt=-200A/us	-	22	-	ns

#### Remark:

- 1.Customer should obtain the latest version of datasheet before placing order, and verify the relevant information.
- 2.Cutting damage and chipping area can't beyond scribe line in given size range.
- 3.Testing system of T<sub>rr</sub> could be different, customer might take secondary test to evaluate if necessary.
- 4.Customer might choose the bonding wire material and diameter according to actual situation, while no less than our recommendation.