

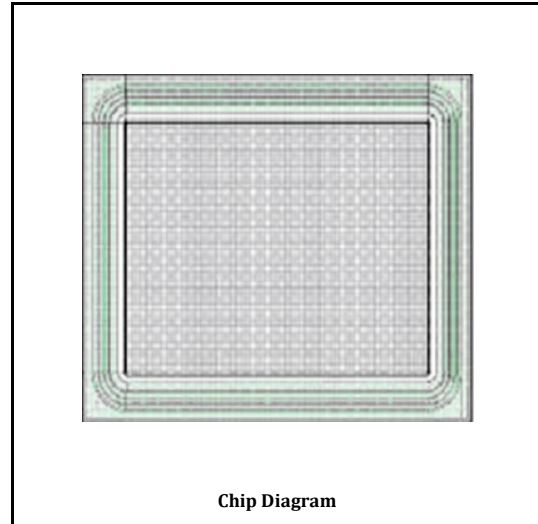
### PRODUCT FEATURES

- ◆ Ultrafast Recovery Time
- ◆ Soft Recovery Characteristics
- ◆ Low Forward Voltage
- ◆ Low stored Charge
- ◆ 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	1150
Top Metal	Al
Back Metal	Ag
Dimensions	um
Chip Size	3000um * 3000um
Pad Size	2300um * 2300um
Wafer Thickness	260±20um
Scribe Line width	50±5 um
Bonding Wire	Al, 15mil*2



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

Parameter	Symbol	Value	Units
DC Blocking Voltage	V <sub>RRM</sub>	600	V
Average Rectified Forward Current	I <sub>FAV</sub>	15	A
Nonrepetitive Peak Surge Current@8.3ms	I <sub>FSM</sub>	150	A
Operating Junction Temperature	T <sub>j</sub>	175	°C
Storage Temperature	T <sub>STG</sub>	- 55~150	°C

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

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> =15A, T <sub>a</sub> =25°C	-	1.30	1.55	V
		I <sub>F</sub> =15A, T <sub>a</sub> =125°C	-	1.20	1.45	V
Reverse Leakage Current	I <sub>R</sub>	V <sub>R</sub> =600V, T <sub>a</sub> =25°C	-	-	2	μA
		V <sub>R</sub> =600V, T <sub>a</sub> =125°C	-	-	100	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	-	30	40	ns
		I <sub>F</sub> =1A, V <sub>R</sub> =30V, di/dt=-200A/us	-	25	-	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.