

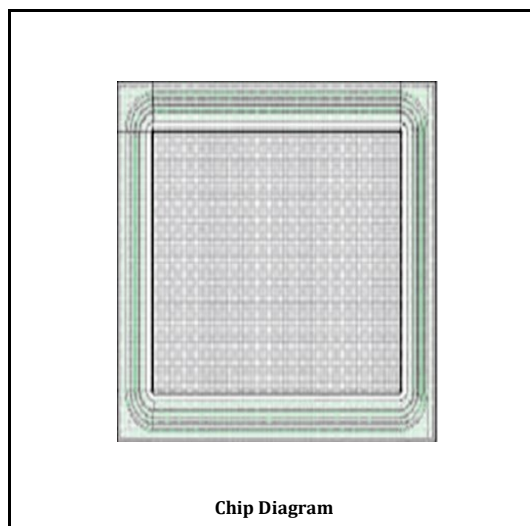
### PRODUCT FEATURES

- ◆ Ultrafast 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
- ◆ PFC

Items	Description
Wafer Size	5 Inch
Gross Die	600
Top Metal	Al
Back Metal	Ag
Dimensions	um
Chip Size	3300um * 5200um
Pad Size	2580um * 4480um
Wafer Thickness	260±20um
Scribe Line width	100 um
Bonding Wire	Al, 15mil*3



### 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>	30	A
Nonrepetitive Peak Surge Current@8.3ms	I <sub>FSM</sub>	300	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> =30A, T <sub>a</sub> =25°C	-	1.90	2.30	V
		I <sub>F</sub> =30A, T <sub>a</sub> =125°C	-	1.35	2.00	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	-	30	-	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	-	26	35	ns
		I <sub>F</sub> =1A, V <sub>R</sub> =30V, di/dt=-200A/us	-	24	-	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.