

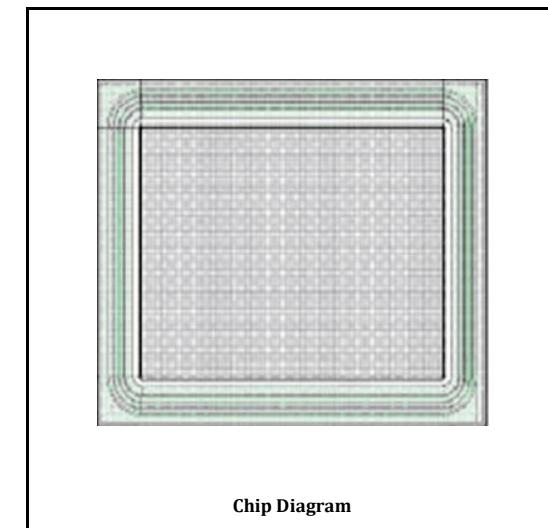
PRODUCT FEATURES

- ◆Ultrafast Recovery Time
- ◆Soft Recovery Characteristics
- ◆Low Forward Voltage
- ◆Low Leakage Current
- ◆Planar Construction

Applications (not limited to)

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

Items	Description
Wafer Size	5 Inch
Gross Die	150
Top Metal	Al/Ag
Back Metal	Ag
Dimensions	um
Chip Size	9800μm * 6500μm
Pad Size	8750μm * 5450μm
Wafer Thickness	260±20μm
Scribe Line width	50 μm
Bonding Wire (In case top metal=Al)	Al, 20mil*4


Absolute Maximum ratings ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Value	Units
DC Blocking Voltage	V_{RRM}	600	V
Average Rectified Forward Current	I_{FAV}	100	A
Nonrepetitive Peak Surge Current@8.3ms	I_{FSM}	850	A
Operating Junction Temperature	T_J	175	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~150	$^\circ\text{C}$

Electrical specification ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Max	Typ	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=50\mu\text{A}$	600	-	670	V
Forward Voltage	V_F	$I_F=100\text{A}, T_a=25^\circ\text{C}$	-	1.45	1.25	V
		$I_F=100\text{A}, T_a=125^\circ\text{C}$	-	1.35	1.15	V
Reverse Leakage Current	I_R	$V_R=600\text{V}, T_a=25^\circ\text{C}$	-	20	-	μA
		$V_R=600\text{V}, T_a=125^\circ\text{C}$	-	-	100	μA
Reverse Recovery Time	T_{rr}	$I_F=0.5\text{A}, I_R=1\text{A}, I_{rr}=0.25\text{A}$	-	120	80	ns
		$I_F=1\text{A}, V_R=30\text{V}, di/dt=-200\text{A/us}$	-	-	60	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 Trr 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.