GWIT
Guang Wei Integration Technology

GF130M2HUF

Fast Recovery Epitaxial Diode(FRED)

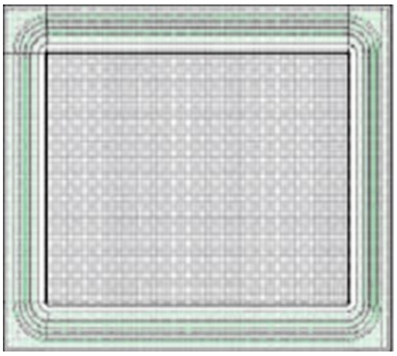
PRODUCT FEATURES

- ◆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

Items	Description
Wafer Size	5 Inch
Gross Die	900 EA
Top Metal	Al/Ag
Back Metal	Ag
Dimensions	um
Chip Size	3310µm * 3310µm
Pad Size	2500µm * 2500µm
Wafer Thickness	260±20µm
Scribe Line width	60 µm
Bonding Wire In case top Metal=Al	Al, 15mil*3



Chip Diagram

Absolute Maximum ratings（T_a=25℃）

Parameter	Symbol	Value	Units
DC Blocking Voltage	V_{RRM}	200	V
Average Rectified Forward Current	I_{FAV}	35	A
Nonrepetitive Peak Surge Current@8.3mS	I_{FSM}	250	A
Operating Junction Temperature	T_J	175	℃
Storage Temperature	T_{STG}	- 55~150	℃

Electrical specification（T_a=25℃）

Parameter	Symbol	Test Conditions	Min	Typ	Max	Units
Reverse Breakdown Voltage	V_{BR}	I_R=50µA	200	250	-	V
Forward Voltage	V_F	I_F=35A, T_a=25℃	-	0.98	1.05	V
		I_F=35A,T_a=125℃	-	0.83	0.95	V
Reverse Leakage Current	I_R	V_R=200V,T_a=25℃	-	-	2	µA
		V_R=200V, T_a=125℃	-	-	50	µA
Reverse Recovery Time	T_{rr}	I_F=0.5A, I_R=1A, I_{rr}=0.25A	-	25	35	ns
		I_F=1A, V_R=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 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 acutal sitatuation ,while no less than our recommendation.