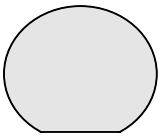
MH2102WZ

650V 50A Fast Recovery Diode Datasheet

V_{RM}	650V
$I_{F\ (Nominal)}$	50A
$V_{F\ (Typ.)}$	1.45V
Max. Possible Chips per Wafer	1040pcs

●Outline

Wafer



●Features

1) Light Punch Through Type
2) Low Forward Voltage
3) Very Fast & Soft Recovery
4) Low Recovery Loss

●Inner Circuit

(1) Anode
(2) Cathode

●Application

Free Wheeling

●Absolute Maximum Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage, T_j = 25°C	V_{RM}	650	V
Forward Current	I_F *1	*1)	A
Pulsed Forward Current	I_{FP} *2	200	A
Operating Junction Temperature	T_j	-40 to +175	°C

*1 Depending on thermal properties of assembly

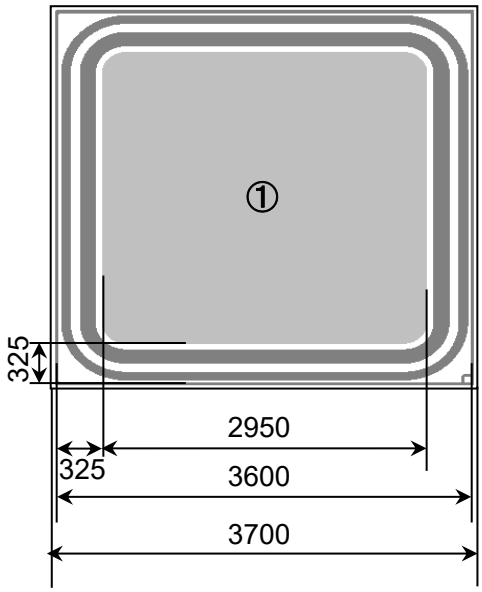
*2 Pulse width limited by $T_{jmax.}$

●Electrical Characteristics (at T_j = 25°C unless otherwise specified, in case of TO-247N package)

Parameter	Symbol	Conditions	Values			Unit
			Min.	Typ.	Max.	
Breakdown Voltage	BV	I_R = 10μA	650	-	-	V
Reverse Current	I_R	V_R = 650V	-	-	10	μA
Forward Voltage	V_F *3	I_F = 50A, T_j = 25°C	-	1.45	1.9	V
		T_j = 175°C	-	1.55	-	

*3 Design assurance without measurement

●Chip Information

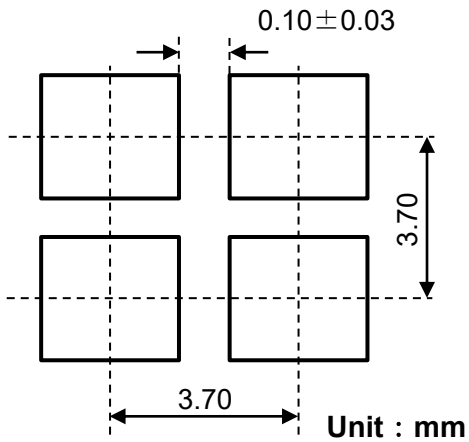


Unit : μm

: Pad Area

① : Anode Bonding Pad

Backside : Cathode



Wafer Size	150mm
Wafer Thickness	0.07±0.01mm
Chip Size	3.70mm×3.70mm
Cut Line Width	0.10±0.03mm
Top Side Metallization	AlSiCu:5.0μm
Back Side Metallization	Ti/Ni:0.4μm/Au:0.05μm
Passivation	Polyimide

●Further Electrical Characteristics

Switching characteristics and thermal properties are depending strongly on module design and mounting technology and can therefore not be specified for a bare die.

This chip data sheet refers to the device data sheet	RGTV00TS65D

Notes

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2) Before you use our Products, please contact our sales representative and verify the latest specifications :

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