Bulletin I0141J 01/01

International
IOR Rectifier

S1232

PHASE CONTROL THYRISTORS

- **Junction Size** : **Square 250 mils - IR255SG12H/ S1232**
- **Wafer Size** : **4"**
- **V_{RRM} Class** : **1200 V**
- **Passivation Process** : **Glassivated MESA**
- **Reference IR Packaged Part** : **n. a.**

Major Ratings and Characteristics

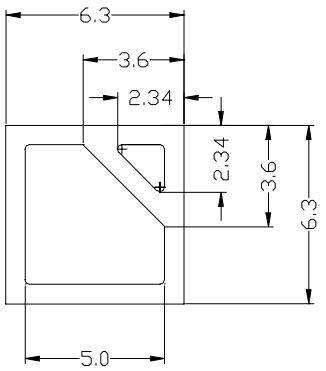
Parameters		Units	Test Conditions
V_{TM}	Typical On-state Voltage	1.25V	$T_J = 25°C$, $I_T = 25A$
V_{DRM}/V_{RRM}	Direct and Reverse Breakdown Voltage	1200V	$T_J = 25°C$, $I_{DRM}/I_{RRM} = 100\mu A$ **(1)**
I_{GT}	Required DC Gate Current to Trigger	5 to 80 mA	$T_J = 25°C$, anode supply = 6V, resistive load
V_{GT}	Max. Required DC Gate Voltage to Trigger	2 V	$T_J = 25°C$, anode supply = 6V, resistive load
I_H	Holding Current Range	5 to 100 mA	Anode supply = 6V, resistive load
I_L	Maximum Latching Current	300mA	Anode supply = 6V, resistive load

(1) Nitrogen flow on die edge.

Mechanical Characteristics

Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Nominal Front Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Chip Dimensions	250 x 250 mils (see drawing)
Wafer Diameter	100 mm, with std. <110> flat
Wafer Thickness	$330\mu m \pm 10\mu m$
Maximum Width of Sawing Line	$130\mu m$
Reject Ink Dot Size	0.25 mm diameter minimum
Ink Dot Location	See drawing
Recommended Storage Environment	Storage in original container, in dessicated nitrogen, with no contamination

Outline Table

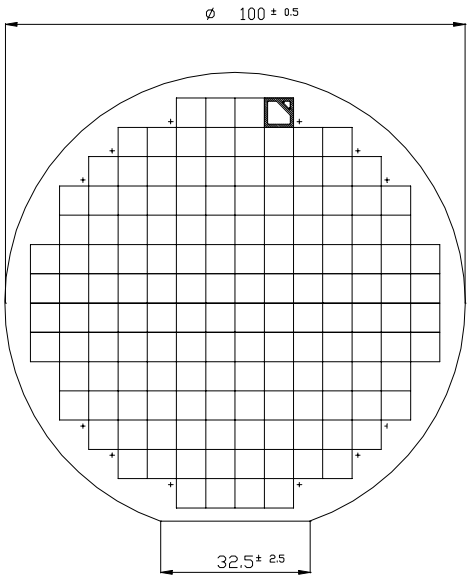


All dimensions are in millimiters

Wafer Layout

TOP VIEW

N° 148 Basic Cells



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