

**PHASE CONTROL THYRISTORS**

- **Junction Size:** Square 370 mils
- **Wafer Size:** 4"
- **V<sub>RRM</sub> Class:** 600 to 1200 V
- **Passivation Process:** Glassivated MESA
- **Reference IR Packaged Part:** 50RIA Series

**Major Ratings and Characteristics**

Parameters	Units	Test Conditions
V <sub>TM</sub> Maximum On-state Voltage	1.2 V	T <sub>J</sub> = 25°C, I <sub>T</sub> = 25 A
V <sub>DRM</sub> /V <sub>RRM</sub> Direct and Reverse Breakdown Voltage	600 to 1200 V	T <sub>J</sub> = 25°C, I <sub>DRM</sub> /I <sub>RRM</sub> = 100 μA (1)
I <sub>GT</sub> Max. Required DC Gate Current to Trigger	150 mA	T <sub>J</sub> = 25°C, anode supply = 6 V, resistive load
V <sub>GT</sub> Max. Required DC Gate Voltage to Trigger	2 V	T <sub>J</sub> = 25°C, anode supply = 6 V, resistive load
I <sub>H</sub> Holding Current Range	5 to 200 mA	Anode supply = 6 V, resistive load
I <sub>L</sub> Maximum Latching Current	400 mA	Anode supply = 6 V, resistive load

(1) Nitrogen flow on die edge.

**Mechanical Characteristics**

Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 6 KA)
Nominal Front Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 6 KA)
Chip Dimensions	370x370 mils (see drawing)
Wafer Diameter	100 mm, with std. <110> flat
Wafer Thickness	370 μm ± 10 μm
Maximum Width of Sawing Line	130 μm
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

# IR370SG..HCB

Preliminary Data Sheet I0212J 12/99

International  
**IR** Rectifier

## Ordering Information Table

**Device Code**

IR	370	S	G	12	H	CB
①	②	③	④	⑤	⑥	⑦

- 1** - International Rectifier Device
- 2** - Chip Dimension in Mils
- 3** - Type of Device: S = Solderable SCR
- 4** - Passivation Process: G = Glassivated MESA
- 5** - Voltage code: Code x 100 =  $V_{RRM}$
- 6** - Metallization: H = Silver (Anode) - Silver (Cathode)
- 7** - CB = Probed Uncut Die (wafer in box)  
None = Probed Die in chip carrier

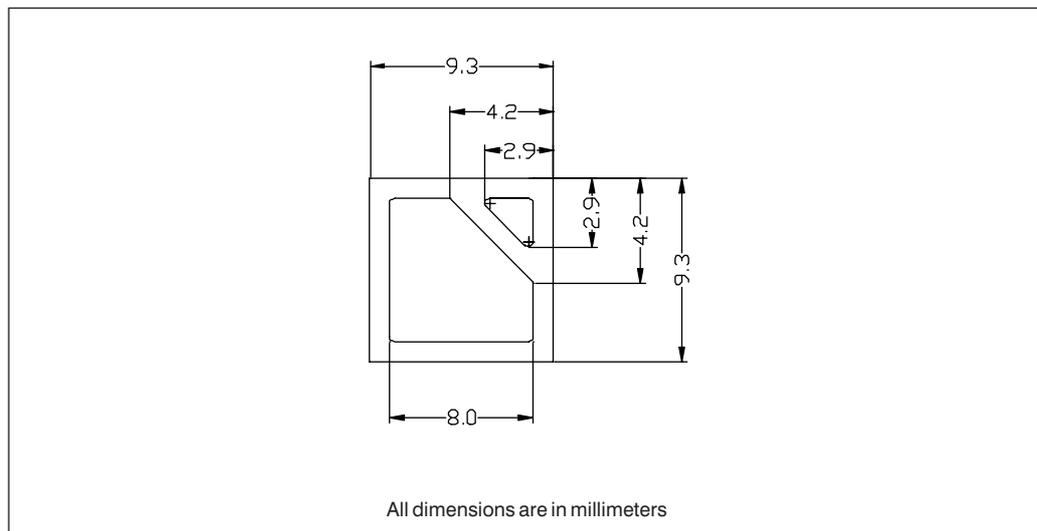
**Available Class**

06 = 600 V

08 = 800 V

12 = 1200 V

## Outline Table



Wafer Layout

