

PHASE CONTROL THYRISTORS

- Junction Size : Square 340 mils - IR343SG12H/ S1233
- Wafer Size : 4"
- V_{RRM}/V_{DRM} Class : 1200 V
- Passivation Process : Glassivated MESA
- Reference IR Packaged Part : 50RIA Series

Major Ratings and Characteristics

Parameters	Units	Test Conditions
V_{TM} Typical On-state Voltage	1.2 V	$T_J = 25^\circ\text{C}$, $I_T = 25\text{ A}$
V_{RRM}/V_{DRM} Direct and Reverse Breakdown Voltage	1200 V	$T_J = 25^\circ\text{C}$, $I_{DRM}/I_{RRM} = 100\ \mu\text{A}$ (1)
I_{GT} Required DC Gate Current to Trigger	5 to 100 mA	$T_J = 25^\circ\text{C}$, anode supply = 6 V, resistive load
V_{GT} Max. Required DC Gate Voltage to Trigger	2 V	$T_J = 25^\circ\text{C}$, anode supply = 6 V, resistive load
I_H Holding Current Range	5 to 200 mA	Anode supply = 6 V, resistive load
I_L Maximum Latching Current	400 mA	Anode supply = 6 V, resistive load

(1) Nitrogen flow on die edge.

Mechanical Characteristics

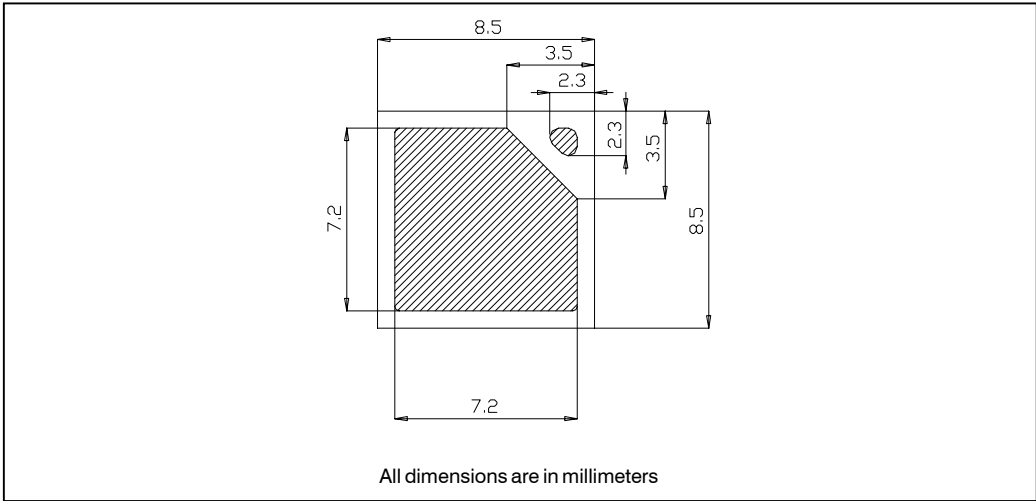
Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Nominal Front Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Chip Dimensions	340x340 mils (see drawing)
Wafer Diameter	100 mm, with std. < 110 > flat
Wafer Thickness	$330\ \mu\text{m} \pm 10\ \mu\text{m}$
Maximum 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

S1233

Bulletin I0142J 01/01

International
IR Rectifier

Outline Table



Wafer Layout

