

PHASE CONTROL THYRISTORS

- Junction Size : Square 180 mils - IR180SH12H/ S1231
- Wafer Size : 4"
- V_{RRM}/V_{DRM} 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	1.3 V	$T_J = 25^\circ\text{C}$, $I_T = 25\text{ A}$
V_{RRM}/V_{DRM} Reverse Breakdown Voltage	1200V	$T_J = 25^\circ\text{C}$, $I_{RRM} = 300\ \mu\text{A}$ (1)
I_{GT} Required DC Gate Current to Trigger	5 to 45 mA	$T_J = 25^\circ\text{C}$, anode supply = 6 V, resistive load
V_{GT} Max. Required DC Gate Voltage to Trigger	1.9 V	$T_J = 25^\circ\text{C}$, anode supply = 6 V, resistive load
I_H Holding Current Range	5 to 150 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

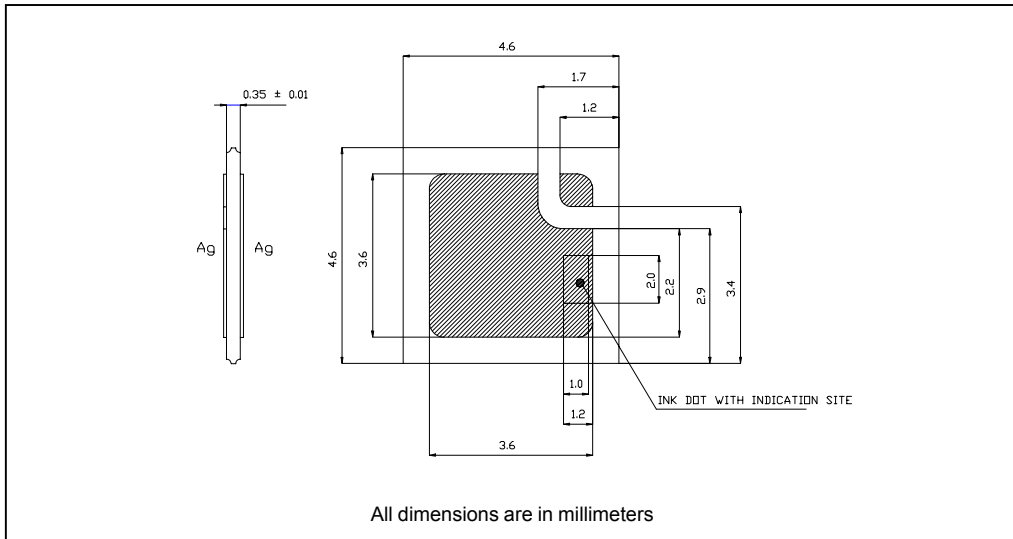
Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Nominal Front Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 15 KA)
Chip Dimensions	180 x 180 mils (see drawing)
Wafer Diameter	100 mm, with std. < 100 > flat
Wafer Thickness	350 $\mu\text{m} \pm 10\ \mu\text{m}$
Maximum 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

S1231

Bulletin I0143J 01/01

International
IRF Rectifier

Outline Table



Wafer Layout

