

PHASE CONTROL THYRISTORS

- **Junction Size:** Square 250 mils
- **Wafer Size:** 4"
- **V_{RRM} Class:** 1200 V
- **Passivation Process:** Glassivated MESA
- **Reference IR Packaged Part:** 40TPS Series

Major Ratings and Characteristics

Parameters	Units	Test Conditions
V_{TM} Maximum On-state Voltage	1.3 V	$T_J = 25^\circ\text{C}$, $I_T = 25\text{ A}$
V_{RRM} Reverse Breakdown Voltage	1200 V	$T_J = 25^\circ\text{C}$, $I_{RRM} = 100\ \mu\text{A}$ (1)
I_{GT} Max. Required DC Gate Current to Trigger	150 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

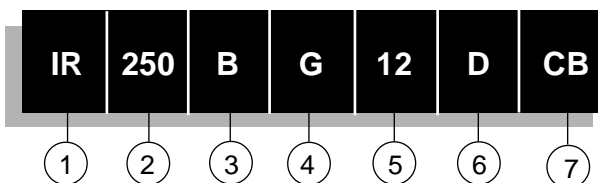
(1) Nitrogen flow on die edge.

Mechanical Characteristics

Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 4 KA - 6 KA)
Nominal Front Metal Composition, Thickness	100% Al, (20 μm)
Chip Dimensions	250 x 250 mils (see drawing)
Wafer Diameter	100 mm, with std. <110> flat
Wafer Thickness	370 $\mu\text{m} \pm 10\ \mu\text{m}$
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

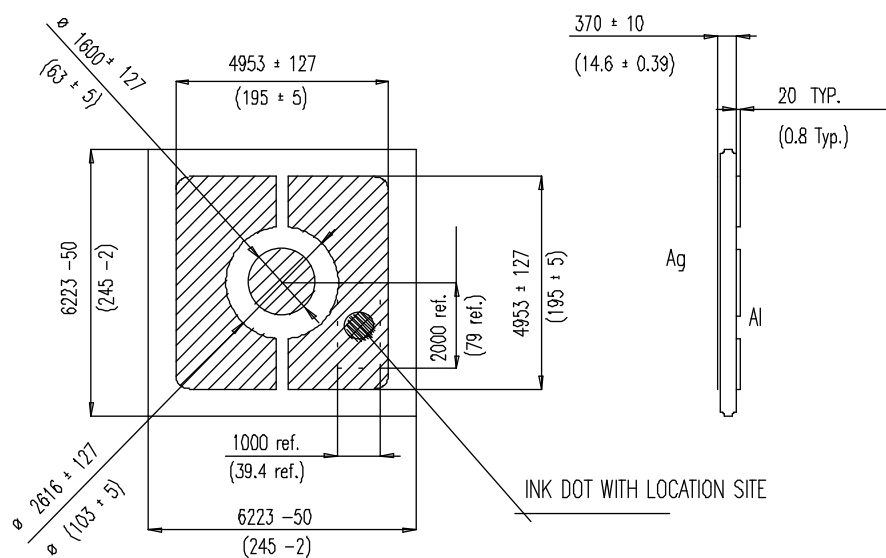
Ordering Information Table

Device Code



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

Outline Table



All dimensions are in microns (mils)

Wafer Layout

