Bulletin I0125J 07/97

International
IOR Rectifier

IR180LM..CS05CB SERIES

FAST RECOVERY DIODES

- **Junction Size:** **Square 180 mils**
- **Wafer Size:** **4"**
- **V_{RRM} Class:** **1000 and 1200 V**
- **Passivation Process:** **Glassivated MOAT**
- **Reference IR Packaged Part:** **20ETF Series**

Major Ratings and Characteristics

Parameters		Units	Test Conditions	
V_{FM}	Maximum Forward Voltage	1350 mV	T_J = 25°C, I_F = 20 A	
V_{RRM}	Reverse Breakdown Voltage Range	1000 and 1200 V	T_J = 25°C, I_{RRM} = 100 µA	**(1)**

(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	180 x 180 mils (4.57x4.57 mm) - see drawing
Wafer Diameter	100 mm, with std. < 110 > flat
Wafer Thickness	260 µm
Maximum Width of Sawing Line	45 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

IR	180	L	M	12	C	S05	CB
1	2	3	4	5	6	7	8

1 - International Rectifier Device

2 - Chip Dimension in Mils

3 - Type of Device: L = Wire Bondable Fast Recovery Diode

4 - Passivation Process: M = Glassivated MOAT

5 - Voltage code: Code x 100 = V_{RRM}

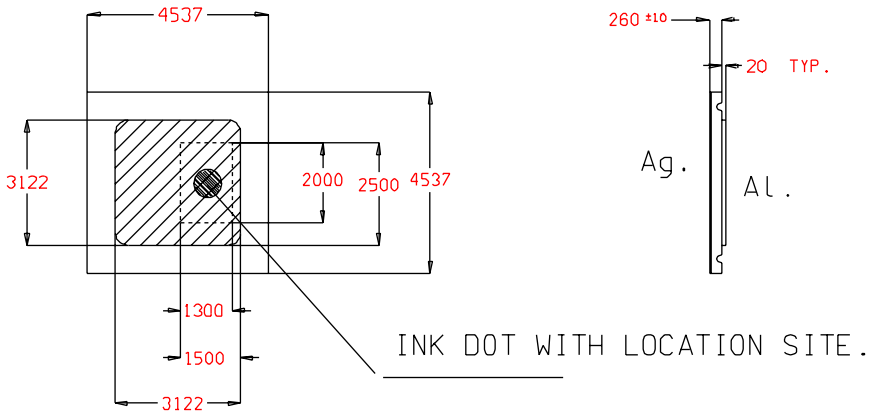
Available Class
10 = 1000 V
12 = 1200 V

6 - Metallization: C = Aluminium (Anode) - Silver (Cathode)

7 - Fast Recovery Type: S05 = 500 nsec

8 - CB = Probed Uncut Die (wafer in box)
None = Probed Die in chip carrier

Outline Table

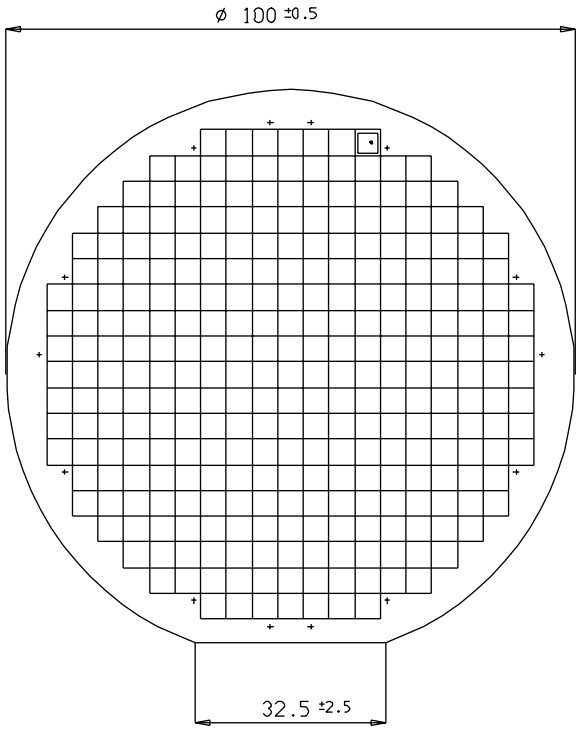


All dimensions are in microns

Wafer Layout

TOP VIEW

N° 293 Basic Cells



All dimensions are in millimeters