Bulletin I0113J 05/00

International
IOR Rectifier

IR390LM..CS05CB SERIES

FAST RECOVERY DIODES

- **Junction Size:** **Rectangular 390 x 270 mils**
- **Wafer Size:** **4"**
- **V_{RRM} Class:** **1000 to 1200 V**
- **Passivation Process:** **Glassivated MOAT**
- **Reference IR Packaged Part:** **80EPF Series**

Major Ratings and Characteristics

Parameters		Units	Test Conditions	
V_{FM}	Maximum Forward Voltage	1300 mV	$T_J = 25°C$, $I_F = 80$ A	
V_{RRM}	Reverse Breakdown Voltage Range	1000 to 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	390 x 270 mils (9.91x6.86 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	390	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}

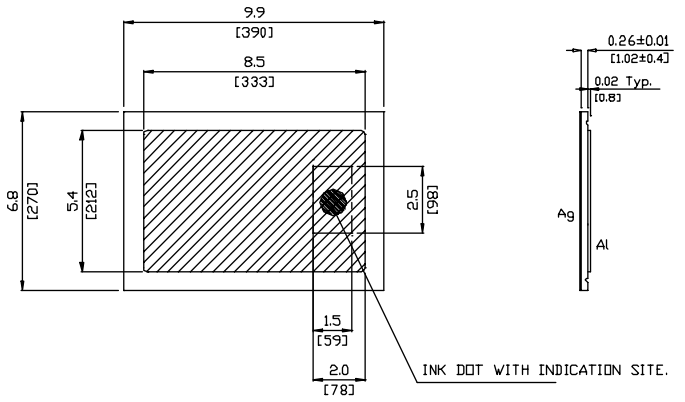
Available Class
10 = 1000 V
12 = 1200 V

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

7 - T_{rr} code: S05 = 500 nsec

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

Outline Table

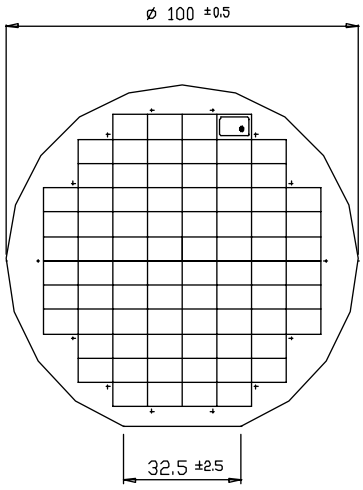


All dimensions are in millimeters (mils)

Wafer Layout

TOP VIEW

N° 80 Basic Cells



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