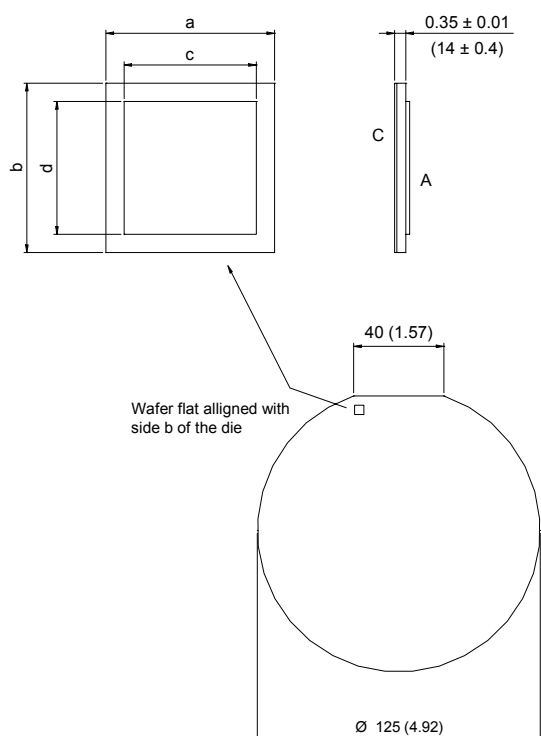


Fred Die in Wafer Form



NOTES:

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (MILS).
2. CONTROLLING DIMENSION (MILS):
3. DIMENSIONS AND TOLERANCES:
 - a = $1.905 \pm 0, -0.01$
(75 $\pm$ 0, -04)
 - b = $1.905 \pm 0, -0.01$
(75 $\pm$ 0, -04)
 - c = $1.199 \pm 0, -0.01$
(47.2 $\pm$ 0, -04)
 - d = $1.199 \pm 0, -0.01$
(47.2 $\pm$ 0, -04)
4. LETTER DESIGNATION:
 - A = Anode (Top Metal)
 - C = Cathode (Back Metal)
5. SAWING:
 - Recommended Blade
 - SEMITEC S1025 QS00 Blade
 - Sawing Street
 - $0.05 \pm 0, -0.005$
 - (2 $\pm$ 0, - 0.2)

NOT TO SCALE

Electrical Characteristics (Wafer Form)

Parameters	Units	Test Conditions
V_{FM} Typical Forward Voltage	1.5 V	$T_J = 25^\circ\text{C}$, $I_F = 3\text{ A}$
V_{RRM} Minimum Reverse Breakdown Voltage	600 V	$T_J = 25^\circ\text{C}$, $I_{RRM} = 100\text{ }\mu\text{A}$
I_{RM} Max. Reverse Leakage Current	50 μA	$T_J = 25^\circ\text{C}$, $V_{RRM} = 600\text{ V}$
t_{rr} Typ. Reverse Recovery Time	27 ns	$I_F = 1\text{ A}$, $di/dt = 100\text{ A}/\mu\text{s}$, $V_R = 30\text{ V}$

Mechanical Data

Nominal Back Metal Composition, Thickness	Cr - Ni - Ag (1 KA - 2 KA - 3 KA)
Nominal Front Metal Composition, Thickness	99% Al, 1% Si (3 microns)
Chip Dimensions	0.160" x 0.160" (see drawing)
Reject Ink Dot Size	0.25 mm diameter minimum
Recommended Storage Environment	Storage in original container, in dessicated nitrogen, with no contamination

Packaging

Device #	Description	Minimum Order Quantity Die in Sale Package
FD075xxx5 B	Inked Probed Unsawn Wafer (Wafer in Box)	2500
FD075xxx5 R	Probed Die in Tape & Reel	n/a
FD075xxx5 P	Probed Die in Waffle Pack	2500
FD075xxx5 F	Inked Probed Sawn Wafer on Film	2500

Ordering Information Table

Device Code

The diagram illustrates the Device Code structure, which consists of seven positions. Each position is represented by a black box containing a white digit or letter. Below each box is a white circle containing a number from 1 to 7, indicating the position number. The positions are: 1 (FD), 2 (075), 3 (H), 4 (06), 5 (A), 6 (5), and 7 (B).

Position	Digit/Letter
1	FD
2	075
3	H
4	06
5	A
6	5
7	B

- 1** - Fred Die
- 2** - Chip Dimension in Mils: 075 = 75 x 75 square
- 3** - Process: H = HyperFast
- 4** - Voltage code Vrrm (*100) eg: 06 = 600V
- 5** - Chip surface metallization: A = Aluminium (anode), Silver (cathode)
- 6** - Wafer diameter in inches
- 7** - Packaging (B = inked Probed Unsawn Wafers)

Data and specifications subject to change without notice.
This product has been designed and qualified for Industrial Level.
Qualification Standards can be found on IR's Web site.

International
IR Rectifier

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