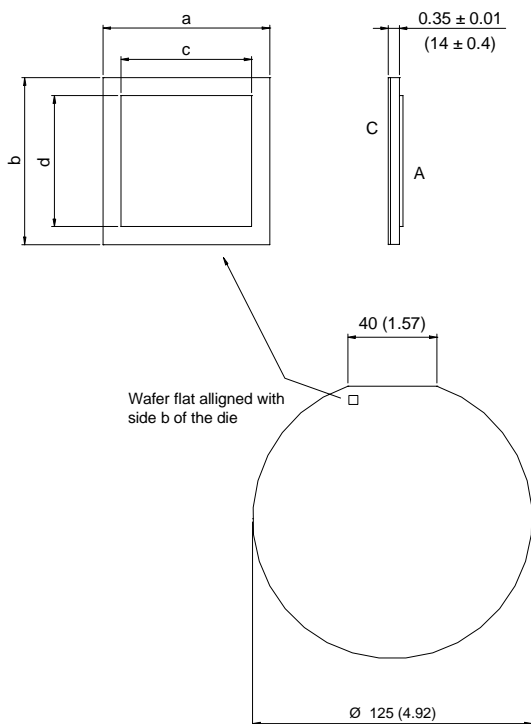


International IOR Rectifier

FD120L03A5.

Fred Die in Wafer Form



NOTES:

1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS (MILS).
2. CONTROLLING DIMENSION (MILS):
3. DIMENSIONS AND TOLERANCES:
 - $a = 3.048 \pm 0.01$
(120 \pm 0.4)
 - $b = 3.048 \pm 0.01$
(120 \pm 0.4)
 - $c = 2.714 \pm 0.01$
(106.8 \pm 0.4)
 - $d = 2.714 \pm 0.01$
(106.8 \pm 0.4)
4. LETTER DESIGNATION:
 - A = Anode (Top Metal)
 - C = Cathode (Back Metal)
5. SAWING:
 - Recommended Blade
 - SEMITEC S1025 QS00 Blade
 - Sawing Street
 - 0.066 \pm 0.005
 - (2.60 \pm 0.20)

NOT TO SCALE

Reference Package: TO-220

FD120L03A5.

Bulletin I0515J rev. A 01/03

International
IR Rectifier**Electrical Characteristics (Wafer Form)**

Parameters	Units	Test Conditions
V_{FM} Maximum Forward Voltage	1.0 V	$T_J = 25^\circ\text{C}$, $I_F = 15\text{ A}$
V_{RRM} Minimum Reverse Breakdown Voltage	600 V	$T_J = 25^\circ\text{C}$, $I_{RRM} = 100\ \mu\text{A}$
I_{RM} Max. Reverse Leakage Current	10 μA	$T_J = 25^\circ\text{C}$, $V_{RRM} = 300\text{ V}$
t_{rr} Typ. Reverse Recovery Time	85 ns	$I_F = 15\text{ A}$, $di/dt = 200\text{ A}/\mu\text{s}$, $V_R = 200\text{ V}$

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	0.120" x 0.120" (see drawing)
Reject Ink Dot Size	0.25 mm diameter minimum
Recommended Storage Environment	Storage in original container, in desiccated nitrogen, with no contamination

Packaging

Device #	Description	Minimum Order Quantity Die in Sale Package
FD120xxx5 B	Inked Probed Unsawn Wafer (Wafer in Box)	1000
FD120xxx5 R	Probed Die in Tape & Reel	n/a
FD120xxx5 P	Probed Die in Waffle Pack	1000
FD120xxx5 F	Inked Probed Sawn Wafer on Film	1000

Ordering Information Table

Device Code															
	<table border="1" style="margin: auto;"> <tr> <td style="padding: 5px;">FD</td> <td style="padding: 5px;">120</td> <td style="padding: 5px;">L</td> <td style="padding: 5px;">03</td> <td style="padding: 5px;">A</td> <td style="padding: 5px;">5</td> <td style="padding: 5px;">B</td> </tr> <tr> <td style="text-align: center;">①</td> <td style="text-align: center;">②</td> <td style="text-align: center;">③</td> <td style="text-align: center;">④</td> <td style="text-align: center;">⑤</td> <td style="text-align: center;">⑥</td> <td style="text-align: center;">⑦</td> </tr> </table>	FD	120	L	03	A	5	B	①	②	③	④	⑤	⑥	⑦
FD	120	L	03	A	5	B									
①	②	③	④	⑤	⑥	⑦									
<p>1 - Fred Die</p> <p>2 - Chip Dimension in Mils: 120 = 120x120 square</p> <p>3 - Process Code L</p> <p>4 - Voltage code Vrrm (*100) eg: 03 = 300V</p> <p>5 - Chip surface metallization: A = Aluminium (anode), Silver (cathode)</p> <p>6 - Wafer diameter in inches</p> <p>7 - Packaging: B = Inked Probed Unsawn Wafer (Wafer in box)</p>															

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.