# INFD065C1504S4W01A

## ◇ 650V 150mΩ D-Mode GaN HEMT Preliminary wafer datasheet

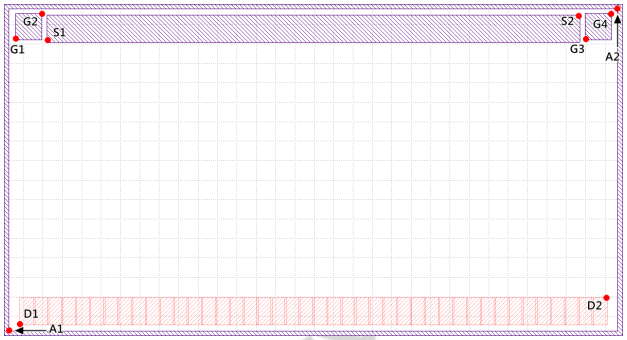
## Applications

- Power Adapters / Converter
- PFC Application
- Appliance Motor Drives
- Wireless Power Transfer
- Synchronous Rectifier for Application

## Key Features

| Parameter | Value | Unit |
|---|---|---|
| $BV_{DSS}$ | 650 | V |
| $I_D$ | 12 | A |
| Die Size | 3190x1705 | um |
| Gross Die | 1152 | ea |

## Chip Size & Pad Position (unit: um)




Die w/o scribe line(50um)

A1(0,0), A2(3140,1655)

Gate

G1(32.5,1496), G2(167.5,1631)

G3(2972.5,1496), G4(3107.5,1631)

Source

S1(195,1483.5), S2(2945,1623.5)

Source

D1(54.5,32), D2(3085.5,172)

## Die Descriptions

- Wafer Size: 4 inch (±0.1inches)
- Wafer THK: 650 ±25um
- Die Size: 3190x1705 um
- Scribe Line Width: 50 um
- Pad Metal: Al
- Metal Thickness: 4um
- Bonding Area:
  - Gate: 135*135
  - Drain: 3031*140
  - Source: 2750*140
- GDPW: 1152 ea (E.E=2mm)

## Static Electrical Characteristic ($T_A$ = 25 °C unless otherwise noted)

| Parameter | Symbol | Test Conditions | Value | | | Unit |
|---|---|---|---|---|---|---|
| | | | Min. | Typ. | Max. | |
| Drain-Source Breakdown Voltage | $BV_{DSS}$ | $V_G$=-22 V, $I_D$=10 uA, | 650 | | | V |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_D$=10V , $I_D$=1 mA | -18 | -15 | -12 | V |
| Gate -Source Leakage Current | $I_{GSS}$ | $V_D$= 0V, $V_G$=-22 V | - | | 100 | nA |
| Drain-Source Leakage Current | $I_{DSS}$ | $V_D$=650 V, $V_G$=-22 V | - | | 1.2 | uA |
| Drain-Source on-state Resistance | $R_{DS(on)}$ | $I_D$=2 A, $V_G$=0 V | - | 150 | | mohm |
| Drain Current @T=25℃ | $I_D$ | $V_D$=10V, $V_G$=+1V | - | 12 | - | A |

1) Performance will vary based on assembly technique and substrate of choice