

INFD065C0754S6W01A

◇ 650V 75mΩ D-Mode GaN HEMT Preliminary wafer datasheet

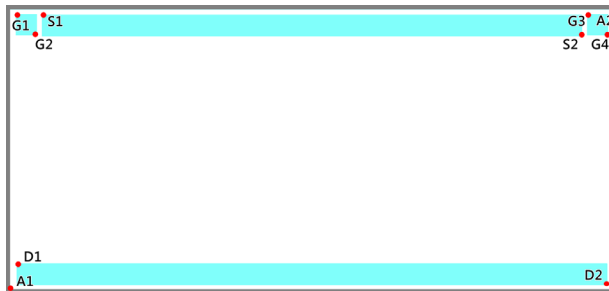
Applications

- 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	22	A
Die Size	4072x1905	um
Gross Die	826	ea

Chip Size & Pad Position (unit: um)



Die w/o scribe line(50um)

A1(0,0), A2(4022,1855)

Gate

G1(39,1823), G2(179,1683)

G3(3843,1823), G4(3983,1683)

Source

S1(213,1818), S2(3809,1678)

Source

D1(47,169), D2(3976,29)

Die Descriptions

- Wafer Size: 4 inch (± 0.1 inches)
- Wafer THK: 650 ± 25 um
- Die Size: 4072x1905 um
- Scribe Line Width: 50 um
- Pad Metal: Al
- Metal Thickness: 4um
- Bonding Area:
 - Gate: 140*140
 - Drain: 3929*140
 - Source: 3596*140
- GDPW: 826 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	-		2	uA
Drain-Source on-state Resistance	R _{DS(on)}	I _D =2 A, V _G =0 V	-	75		mohm
Drain Current @T=25°C	I _D	V _D =10V, V _G =+1V	-	22	-	A

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