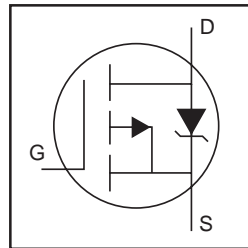


HEXFET® Power MOSFET Die in Wafer Form



-55 V
Size 0.9
Rds(on)=0.172Ω
6" Wafer

Electrical Characteristics (Wafer Form)

Parameter	Description	Guaranteed (Min/Max)	Test Conditions
V _{(BR)DSS}	Drain-to-Source Breakdown Voltage	-55V Min.	V _{GS} = 0V, I _D = -250μA
R _{DS(on)}	Static Drain-to-Source On-Resistance	0.172Ω Max.	V _{GS} = -10V, I _D = -3.6A
		0.280Ω Max.	V _{GS} = -4.5V, I _D = -3.6A
V _{GS(th)}	Gate Threshold Voltage	1.0V Min., 3.0V Max.	V _{DS} = V _{GS} , I _D = -250μA
I _{DSS}	Drain-to-Source Leakage Current	-25μA Max.	V _{DS} = -55V, V _{GS} = 0V, T _J = 25°C
I _{GSS}	Gate-to-Source Leakage	± 15μA Max.	V _{GS} = ±16V
T _J	Operating Junction and	175°C Max.	
T _{STG}	Storage Temperature Range		

Mechanical Data

Nominal Backmetal Composition, Thickness:	Cr-NiV-Ag (1kA°-2kA°-2.5kA°)
Nominal Front Metal Composition, Thickness:	99% Al, 1% Si (0.004 mm)
Dimensions:	0.066" x 0.085" (1.68mm x 2.16 mm)
Wafer Diameter:	150mm, with std. < 100 > flat
Wafer thickness:	.014" + / -.003"
Relevant Die Mechanical Dwg. Number	01-5192
Minimum Street Width	0.1 mm
Reject Ink Dot Size	0.13mm Diameter Minimum, 0.51mm Max.
Recommended Storage Environment:	Store in original container, in dessicated nitrogen, with no contamination
Recommended Die Attach Conditions	For optimum electrical results, die attach temperature should not exceed 300C

Reference Standard IR packaged part (for design) : IRLR/U9024N

Die Outline

Diagram showing die outline with dimensions:
 SOURCE pad: width 0.64 [.025], length 1.27 [.050]
 GATE pad: width 0.51 [.020], length 0.64 [.025]
 Overall die: width 0.066, length 2.16 [.085]

NOTES:

- ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
- CONTROLLING DIMENSION: [INCH].
- LETTER DESIGNATION:
 S = SOURCE SK = SOURCE KELVIN
 G = GATE IS = CURRENT SENSE
- DIMENSIONAL TOLERANCES:
 BONDING PADS:
 WIDTH < 0.635 TOLERANCE = +/- 0.013
 < [.0250] TOLERANCE = +/- [.0005]
 & > 0.635 TOLERANCE = +/- 0.025
 LENGTH > [.0250] TOLERANCE = +/- [.0010]
 OVERALL DIE:
 WIDTH < 1.270 TOLERANCE = +/- 0.102
 < [.050] TOLERANCE = +/- [.004]
 & > 1.270 TOLERANCE = +/- 0.203
 LENGTH > [.050] TOLERANCE = +/- [.008]
- UNLESS OTHERWISE NOTED ALL DIE ARE GEN III