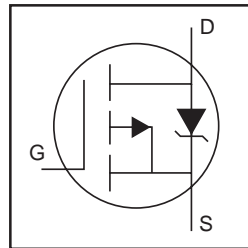


HEXFET® Power MOSFET Die in Wafer Form



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

**Electrical Characteristics ( Wafer Form )**

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