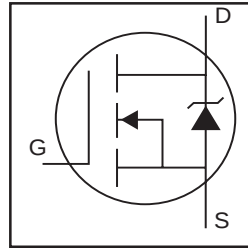


HEXFET® Power MOSFET Die in Wafer Form



40V
Size 4.0
 $R_{DS(on)} = 0.0029\Omega$
6" Wafer

Electrical Characteristics (Wafer Form)

Parameter	Description	Guaranteed (Min/Max)	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	40V Min.	$V_{GS} = 0V$, $I_D = 250\mu A$
$R_{DS(on)}$	Static Drain-to-Source On-Resistance	2.9m Ω Max.	$V_{GS} = 10V$, $I_D = 45A$
$V_{GS(th)}$	Gate Threshold Voltage	2.0V Min., 4.0V Max.	$V_{DS} = V_{GS}$, $I_D = 250\mu A$
I_{DSS}	Drain-to-Source Leakage Current	25 μA Max.	$V_{DS} = 40V$, $V_{GS} = 0V$, $T_J = 25^\circ C$
I_{GSS}	Gate-to-Source Leakage Current	$\pm 200nA$ Max.	$V_{GS} = \pm 20V$
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55 $^\circ C$ to 175 $^\circ C$ Max.	

Mechanical Data

Nominal Back Metal Composition, Thickness:	Cr-NiV-Ag (1kA°-2kA°-2.5kA°)
Nominal Front Metal Composition, Thickness:	100% Al (0.008 mm)
Dimensions:	.170" x .230" [4.32 mm x 5.84 mm]
Wafer Diameter:	150 mm, with 100 flat
Wafer Thickness:	0.356 mm $\pm$ 0.025 mm
Relevant Die Mechanical Drawing Number	01-5384
Minimum Street Width	0.109 mm
Reject Ink Dot Size	0.51 mm Diameter Minimum
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 300 $^\circ C$

Die Outline

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