



Electrical Characteristics

Parameter	Description	Guaranteed (Min/Max)	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	515V Min.	$V_{GS} = 0V$, $I_D = 150\mu A$
$R_{DS(on)}$	Static Drain-to-Source On-Resistance	0.299Ω Max.	$V_{GS} = 10V$, $I_D = 12A$
$V_{GS(th)}$	Gate Threshold Voltage	2.3V Min., 3.9V Max.	$V_{DS} = V_{GS}$, $I_D = 250\mu A$
I_{DSS}	Drain-to-Source Leakage Current	5.0μA Max.	$V_{DS} = 500V$, $V_{GS} = 0V$, $T_J = 25^\circ C$
I_{GSS}	Gate-to-Source Leakage Current	100μA Max.	$V_{GS} = 45V$
T_J T_{STG}	Operating Junction and Storage Temperature Range	-55°C to 150°C Max.	

Mechanical Data

Nominal Back Metal Composition, Thickness:	Cr-NiV-Ag (0.1μm-0.2μm-0.25μm)
Nominal Front Metal Composition, Thickness:	Al with 1% Si (0.003 mm)
Dimensions:	0.247" x 0.350" (6.26 mm x 8.88 mm)
Wafer Diameter:	125 mm
Wafer Thickness:	0.375 mm ± 0.025 mm
Relevant Die Mechanical Drawing Number	01-5426
Minimum Street Width	0.0033"
Reject Ink Dot Size	0.51mm 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 °C
Referenced Package Part:	IRFP460A

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 < [0.0250] TOLERANCE = + / - [0.0005] & > 0.635 TOLERANCE = + / - 0.025 LENGTH > [0.0250] TOLERANCE = + / - [0.0010] OVERALL DIE: < 1.270 TOLERANCE = + / - 0.102 WIDTH < [0.050] TOLERANCE = + / - [0.004] & > 1.270 TOLERANCE = + / - 0.203 LENGTH > [0.050] TOLERANCE = + / - [0.008] - UNLESS OTHERWISE NOTED ALL DIE ARE GEN III
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