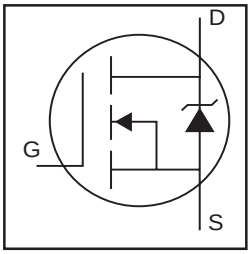
International
IOR Rectifier

PD- 91873

IRFC240

HEXFET® Power MOSFET Die in Wafer Form



200 V
Size 4.0
Rds(on)=0.18Ω
5" Wafer

Electrical Characteristics (Wafer Form)

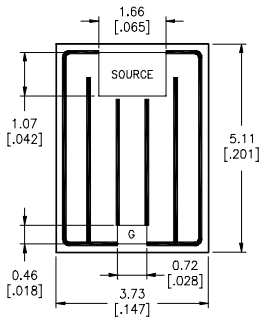
Parameter	Description	Guaranteed (Min/Max)	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	200V Min.	V_{GS} = 0V, I_D = 100µA
$R_{DS(on)}$	Static Drain-to-Source On-Resistance	0.180Ω Max.	V_{GS} = 10V, I_D = 10A
$V_{GS(th)}$	Gate Threshold Voltage	2.3V Min., 4.0V Max.	V_{DS} = V_{GS}, I_D = 250µA
I_{DSS}	Drain-to-Source Leakage Current	25µA Max.	V_{DS} = 200V, V_{GS} = 0V, T_J = 25°C
I_{GSS}	Gate-to-Source Leakage	± 10µA Max.	V_{GS} = ±20V
T_J T_{STG}	Operating Junction and Storage Temperature Range	125°C Max.	

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:	0.147" x 0.201" (3.73mm x 5.11 mm)
Wafer Diameter:	125mm with 100 flat
Wafer thickness:	0.375mm + / -0.020mm
Relevant Die Mechanical Dwg. Number	01-5331
Minimum Street Width	0.084 mm
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 300C

Reference Standard IR packaged part (for design) : IRF640

Die Outline



NOTES:
1. ALL DIMENSIONS ARE SHOWN IN MILLIMETERS [INCHES].
2. CONTROLLING DIMENSION: [INCH].
3. LETTER DESIGNATION:
S = SOURCE SK = SOURCE KELVIN
G = GATE IS = CURRENT SENSE
4. 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]

5. UNLESS OTHERWISE NOTED ALL DIE ARE GEN III

3/23/99