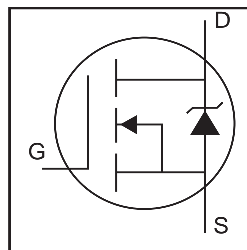
International
IOR Rectifier

PD-TBD

IRFC37N50A

HEXFET® Power MOSFET Die in Wafer Form



500 V
Size 7.3
$R_{DS(on)} = 0.141\Omega$
5" Wafer

Electrical Characteristics (Wafer Form)

Parameter	Description	Guaranteed (Min/Max)	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	500V Min.	V_{GS} = 0V, I_D = 250μA
$R_{DS(on)}$	Static Drain-to-Source On-Resistance	0.141Ω Max.	V_{GS} = 10V, I_D = 20A
$V_{GS(th)}$	Gate Threshold Voltage	2.3V Min.	V_{DS} = V_{GS}, I_D = 250μA
I_{DSS}	Drain-to-Source Leakage Current	18μA Max.	V_{DS} = 500V, V_{GS} = 0V, T_J = 25°C
I_{GSS}	Gate-to-Source Leakage	± 10μA Max.	V_{GS} = ±30V
T_J T_{STG}	Operating Junction and Storage Temperature Range	150°C Max.	

Mechanical Data

Nominal Backmetal Composition, Thickness:	Cr-NiV-Ag (1kA°-2kA°-2.5kA°)
Nominal Front Metal Composition, Thickness:	99% Al, 1% Si (0.004mm)
Dimensions:	0.314" x 0.468" (7.96mm x 11.89 mm)
Wafer Diameter:	125mm with 100 flat
Wafer thickness:	0.375mm ± 0.020mm
Relevant Die Mechanical Dwg. Number	01-5339
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) : IRFPS37N50A

Die Outline