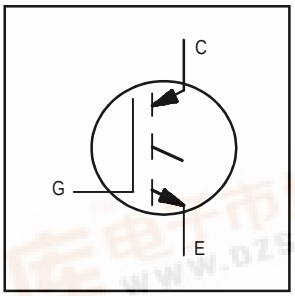
International
IOR Rectifier

PD-91831

IRG4CC20FB

IRG4CC20FB IGBT Die in Wafer Form



600 V
Size 2
Fast Speed
6" Wafer

Electrical Characteristics (Wafer Form)

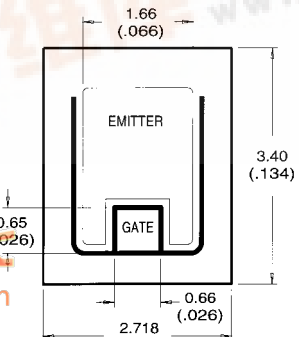
Parameter	Description	Guaranteed (Min/Max)	Test Conditions
$V_{CE\ (on)}$	Collector-to-Emitter Saturation Voltage	4.5V Max.	I_C = 3.25A, T_J = 25°C, V_{GE} = 15V
$V_{(BR)CES}$	Colletor-to-Emitter Breakdown Voltage	600V Min.	T_J = 25°C, I_{CES} = 250µA, V_{GE} = 0V
$V_{GE(th)}$	Gate Threshold Voltage	3.0V Min., 6.0V Max.	V_{GE} = V_{CE} , T_J =25°C, I_C =250µA
I_{CES}	Zero Gate Voltage Collector Current	250 µA Max.	T_J = 25°C, V_{CE} = 600V
I_{GES}	Gate-to-Emitter Leakage Current	± 1.1µA Max.	T_J = 25°C, V_{GE} = +/- 20V

Mechanical Data

Nominal Backmetal Composition, Thickness:	Cr-NiV-Ag (1 kA-2kA-2.5kA)
Nominal Front Metal Composition, Thickness:	99% Al, 1% Si (4 microns)
Dimensions:	0.107" x 0.134"
Wafer Diameter:	150mm, with std. < 100 > flat
Wafer thickness:	.015" + / -.003"
Relevant Die Mechanical Dwg. Number	01-5228
Minimum Street Width	100 Microns
Reject Ink Dot Size	0.25mm Diameter Minimum
Ink Dot Location	Consistent throughout same wafer lot
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) : IRG4BC20F

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 = CURRENTSENSE
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)