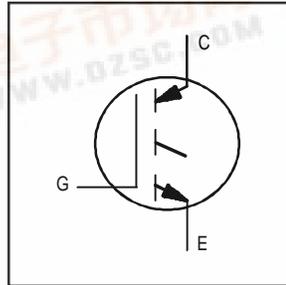


International
IR Rectifier

PD-91824

IRG4CC20KB

IRG4CC20KB IGBT Die in Wafer Form



600 V
Size 2
Ultra-Fast-Speed,
Short Circuit Rated
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. | $I_C = 3.25A, T_J = 25^\circ C, V_{GE} = 15V$ |
| $V_{(BR)CES}$ | Collector-to-Emitter Breakdown Voltage | 600V Min. | $T_J = 25^\circ C, I_{CES} = 250\mu A, V_{GE} = 0V$ |
| $V_{GE(th)}$ | Gate Threshold Voltage | 3.0V Min., 6.5V Max. | $V_{GE} = V_{CE}, T_J = 25^\circ C, I_C = 250\mu A$ |
| I_{CES} | Zero Gate Voltage Collector Current | 250 μA Max. | $T_J = 25^\circ C, V_{CE} = 600V$ |
| I_{GES} | Gate-to-Emitter Leakage Current | $\pm 1.1\mu A$ Max. | $T_J = 25^\circ C, V_{GE} = \pm 20V$ |

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: | .107" x .134" |
| Wafer Diameter: | 150mm, with std. < 100 > flat |
| Wafer thickness: | .015" + / -.003" |
| Relevant Die Mechanical Dwg. Number | 01-5239 |
| 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) : IRG4BC20K

Die Outline

