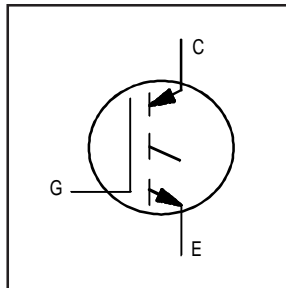


# IRG4CC40FB

## IRG4CC40FB IGBT Die in Wafer Form



600 V  
 Size 4  
 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.            | $I_C = 10A, T_J = 25^\circ C, V_{GE} = 15V$         |
| $V_{(BR)CES}$ | 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., 6.0V Max. | $V_{GE} = V_{CE}, T_J = 25^\circ C, I_C = 250\mu A$ |
| $I_{CES}$     | Zero Gate Voltage Collector Current     | 300 $\mu A$ Max.     | $T_J = 25^\circ C, V_{CE} = 600V$                   |
| $I_{GES}$     | Gate-to-Emitter Leakage Current         | $\pm 11\mu A$ Max.   | $T_J = 25^\circ C, V_{GE} = \pm 20V$                |

### Mechanical Data

|   |   |
|---|---|
| Nominal Backmetal Composition, Thickness:   | Cr-Ni / V-Ag ( 1kA-2kA-2.5kA )  |
| Nominal Front Metal Composition, Thickness: | 99% Al, 1% Si ( 4 microns)  |
| Dimensions:                                 | 0.170" x 0.232"   |
| Wafer Diameter:                             | 150mm, with std. < 100 > flat   |
| Wafer thickness:                            | .015" + / - .003"   |
| Relevant Die Mechanical Dwg. Number         | 01-5219   |
| 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 ) : IRG4PC40F

### Die Outline

