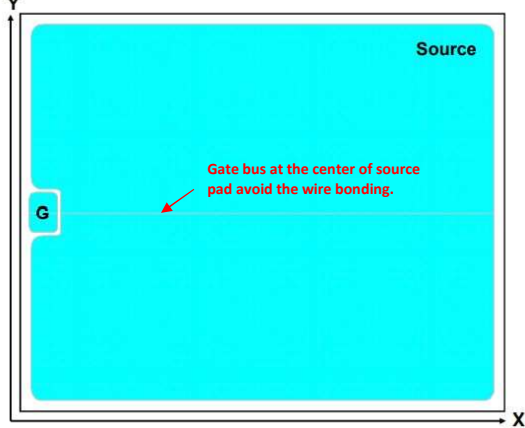


MOSFET Metal-Oxide-Semiconductor Field-Effect Transistor
150V N-Channel MOSFET

| Bonding Pad Information | Chip Information | |
|---|-----------------------------|---|
|  | Die Size (with Scribe Line) | 5,600μm x 4,600μm |
| | Gate Pad Size | 330μm x 460μm |
| | Source Pad Size | Full metalized surface of source region |
| | Scribe Line Size | 60μm |
| | Wafer Size | 6inches |
| | Wafer Thickness | 6mils |
| | Metallization | Front Side: Al/Si/Cu : 4μm Back Side: Ti/Ni/Ag : 1.4μm |
| | Recommended Wire Bonding | |
| | Gate Pad | 5.0 mil x 1 (Al wire) |
| | Source Pad | 20 mil x 3 Stitch (Al wire) |
| | Gross Die | 578ea |

Maximum Ratings (T_A=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|--------------------------------------|------------------|-------------|------|
| Drain-Source Voltage | V _{DSS} | 150 | V |
| Gate-Source Voltage | V _{GSS} | ±20 | V |
| Operating Junction Temperature Range | T _J | -55 to +150 | °C |

Electrical Characteristics (T_A=25°C unless otherwise noted)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---|---------------------|--|------|------|------|------|
| OFF CHARACTERISTIC | | | | | | |
| Drain-Source Breakdown Voltage | BV _{DSS} | V _{GS} =0V, I _D =250uA | 150 | - | - | V |
| Drain-Source Leakage Current | I _{DSS} | V _{GS} =0V, V _{DS} =120V | - | - | 1 | uA |
| Gate-Source Leakage Current | I _{GSS} | V _{GS} =±20V, V _{DS} =0V | - | - | ±100 | nA |
| ON CHARACTERISTIC | | | | | | |
| Gate Threshold Voltage | V _{GS(TH)} | V _{GS} =V _{DS} , I _D =250uA | 3.0 | - | 4.5 | V |
| Static Drain-Source On-Resistance | R _{DS(ON)} | V _{GS} =10V, I _D =3A | - | - | 15 | mΩ |
| DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS | | | | | | |
| Drain-Source Diode Forward Voltage | V _{SD} | V _{GS} =0V, I _S =1A | 0.4 | - | 1.0 | V |

NOTE:

- The data tested by pulsed, pulse with ≤ 300us, duty cycle ≤ 2%.
- R_{DS(ON)} calculated by TO-247-3L package type.