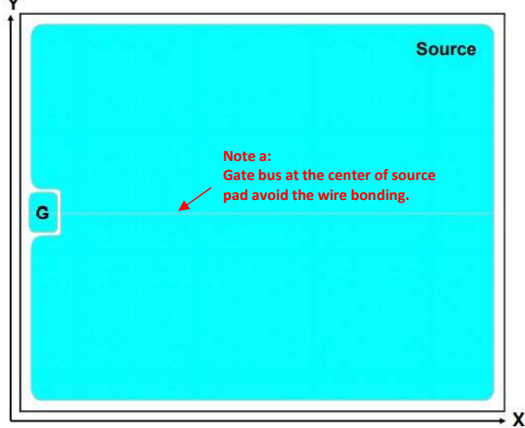


**MOSFET Metal-Oxide-Semiconductor Field-Effect Transistor**  
**150V N-Channel MOSFET**

Bonding Pad Information	Chip Information	
	Die Size (with Scribe Line)	4,960μm x 4,460μm
	Gate Pad Size	330μm x 460μm
	Source Pad Size	Full metalized surface of source region <sup>a</sup>
	Scribe Line Size	60μm
	Wafer Size	6inches
	Wafer Thickness	8mils
	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 2 Stitch (Al wire)
	Gross Die	670ea

**Maximum Ratings (T<sub>A</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V <sub>DSS</sub>	150	V
Gate-Source Voltage	V <sub>GSS</sub>	±20	V
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C

**Electrical Characteristics (T<sub>A</sub>=25°C unless otherwise noted)**

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
<b>OFF CHARACTERISTIC</b>						
Drain-Source Breakdown Voltage	BV <sub>DSS</sub>	V <sub>GS</sub> =0V, I <sub>D</sub> =250uA	150	-	-	V
Drain-Source Leakage Current	I <sub>DSS</sub>	V <sub>GS</sub> =0V, V <sub>DS</sub> =120V	-	-	1	uA
Gate-Source Leakage Current	I <sub>GSS</sub>	V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V	-	-	±100	nA
<b>ON CHARACTERISTIC</b>						
Gate Threshold Voltage	V <sub>GS(TH)</sub>	V <sub>GS</sub> =V <sub>DS</sub> , I <sub>D</sub> =250uA	3.0	3.7	4.5	V
Static Drain-Source On-Resistance	R <sub>DS(ON)</sub>	V <sub>GS</sub> =10V, I <sub>D</sub> =3A	-	17	22	mΩ
<b>DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS</b>						
Drain-Source Diode Forward Voltage	V <sub>SD</sub>	V <sub>GS</sub> =0V, I <sub>S</sub> =1A	0.4	-	1.0	V

**NOTE:**

- The data tested by pulsed, pulse with ≤ 300us, duty cycle ≤ 2%.
- R<sub>DS(ON)</sub> calculated by TO-247-3L package type.