X0001

N-Channel Enhancement Mode MOSFET

20V(VDS) / ±12V(VGS) / 5A(ID)

Rev1.9

Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
X0001	**20V(V_{DS}) / ±12V(V_{GS}) / 5A(I_D)** **N-Channel Enhancement Mode MOSFET**	44,750 (Dual)

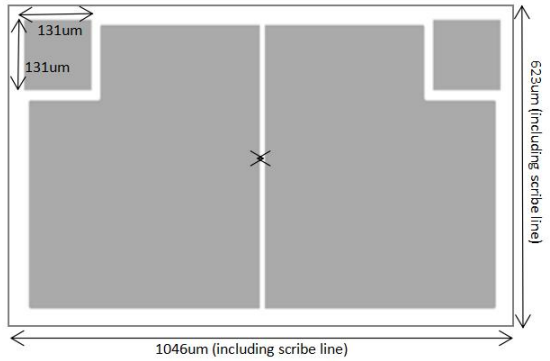
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag (13kA°)
Nominal Front Metal Composition, Thickness	AlCu (4μm)
Wafer Diameter	200mm, with 010 notch
Wafer Thickness	125μm±10μm
Scribe Line Width	60μm
Passivation	$SiN+SiO_2$

3. Key Electrical Characteristics of Die (at Tj = 25 °C, unless otherwise specified)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	20			V	V_{GS}=0V, I_D=250μA
$I_{D(Device\ Ref)}$	Continuous Drain Current			5	A	T_J=25℃
$R_{DS(on)}$(CP)	Static Drain-to-Source On-Resistance		15	21	mΩ	V_{GS}=4.5V, I_D=1A
			19	27	mΩ	V_{GS}=2.5V, I_D=1A
$R_{DS(on)}$(FT)	Static Drain-to-Source On-Resistance		18	24	mΩ	V_{GS}=4.5V, I_D=4A
			22	30	mΩ	V_{GS}=2.5V, I_D=3A
$V_{GS(th)}$	Gate Threshold Voltage	0.5	0.7	1.0	V	V_{DS}=V_{GS}, I_D=250μA
I_{DSS}	Drain-to-Source Leakage Current			1	μA	V_{DS}=19V, V_{GS}=0V
I_{GSS}	Gate-to-Source Leakage Current			±100	nA	V_{GS}=±12V, V_{DS}=0V
T_J, T_{STG}	Operating and Storage Temperature	-55℃ to 150℃ Max				

4. Die Outline & FT Data



Die Size: 1046μm × 623μm (including scribe line)

Gate: 131μm × 131μm

For SOT23-6 package

Suggest Bonding wire:

Gate: 1 × 1.0 mil Cu *2

Source: 6 × 1.65 mil Cu *2