Y0001

P-Channel Enhancement Mode MOSFET

-20V(VDS) / ±12V(VGS) / -2.5A(ID)

Rev1.3

Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
Y0001	**-20V(V_{DS}) / ±12V(V_{GS}) / -2.5A(I_D)** **P-Channel Enhancement Mode MOSFET**	154,660

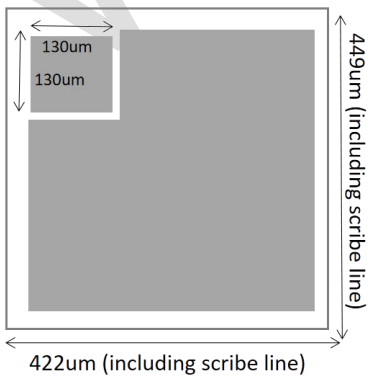
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag-Sn(36kA°)
Nominal Front Metal Composition, Thickness	AlCu (4μm)
Wafer Diameter	200mm, with 010 notch
Wafer Thickness	150μm±10μm
Scribe Line Width	60μm
Passivation	SRO+SiN

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			-2.5	A	T_J=25℃
$R_{DS(on)}$(CP)	Static Drain-to-Source On-Resistance		87	112	mΩ	V_{GS}=-4.5V, I_D=-1A
			117	157	mΩ	V_{GS}=-2.5V, I_D=-1A
$R_{DS(on)}$(FT)	Static Drain-to-Source On-Resistance		90	115	mΩ	V_{GS}=-4.5V, I_D=-2.3A
			120	160	mΩ	V_{GS}=-2.5V, I_D=-1A
$V_{GS(th)}$	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}=-20V, 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



Die Size: 449μm × 422μm (including scribe line)

Gate: 130μm × 130μm

For SOT23-3 package

Suggest Bonding wire：

Gate: 1 × 1.0 mil Cu

Source: 3 × 1.65 mil Cu