

Y0019

P-Channel Enhancement Mode MOSFET

-30V(VDS) / ± 20 V(VGS) / -10A(ID)

Rev0.5



Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
Y0019	-30V(V_{DS}) / $\pm 20V(V_{GS})$ / -10A(I_D) P-Channel Enhancement Mode MOSFET	19,508

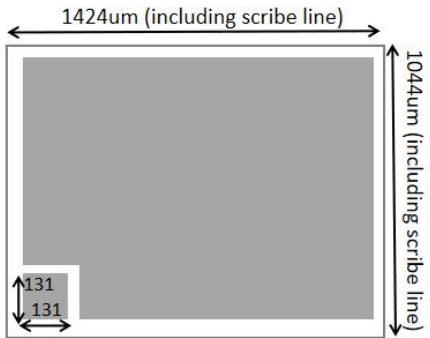
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag (13kÅ)
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 $T_J = 25^\circ\text{C}$, unless otherwise specified)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Conditions
$V_{(BR)DSS}$	Drain-to-Source Breakdown Voltage	-30			V	$V_{GS}=0V$, $I_D=-250\mu A$
$I_{D(Device\ Ref)}$	Continuous Drain Current			-10	A	$T_J=25^\circ\text{C}$
$R_{DS(on)}(CP)$	Static Drain-to-Source On-Resistance		15	23	mΩ	$V_{GS}=-10V$, $I_D=-1A$
			21	31	mΩ	$V_{GS}=-4.5V$, $I_D=-1A$
$R_{DS(on)}(FT)$	Static Drain-to-Source On-Resistance		16	24	mΩ	$V_{GS}=-10V$, $I_D=-10A$
			22	32	mΩ	$V_{GS}=-4.5V$, $I_D=-5A$
$V_{GS(th)}$	Gate Threshold Voltage	-1.0	-1.6	-2.5	V	$V_{DS}=V_{GS}$, $I_D=-250\mu A$
I_{DSS}	Drain-to-Source Leakage Current			-1	µA	$V_{DS}=-30V$, $V_{GS}=0V$
I_{GSS}	Gate-to-Source Leakage Current			±100	nA	$V_{GS}=\pm 20V$, $V_{DS}=0V$
T_J, T_{STG}	Operating and Storage Temperature	-55°C to 150°C Max				

4. Die Outline

	Die Size: 1424µm x 1044µm (including scribe line)
	Gate: 131µm × 131µm
	For SOP-8 package Suggest Bonding wire: Gate: 1×42 µm Cu Source: 14× 42 µm CU