

X1067

N-Channel Enhancement Mode MOSFET

19V(VDS) / ± 10 V(VGS) / 4A(ID)

Rev1.0



Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
X1067	19V(V_{DS}) / $\pm 10V(V_{GS})$ / 4A(I_D) N-Channel Enhancement Mode MOSFET	54,826 (Dual)

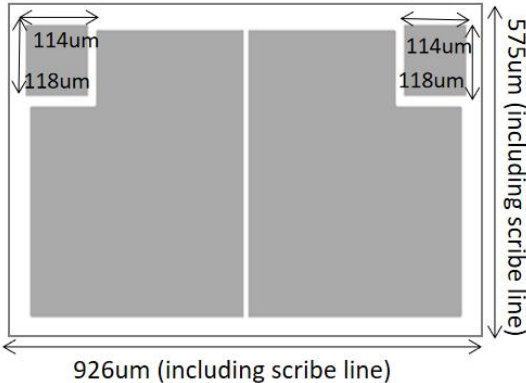
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag (13kÅ°)
Nominal Front Metal Composition, Thickness	AlCu (4µm)
Wafer Diameter	200mm, with Ø10 notch
Wafer Thickness	110µm±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	18	19		V	$V_{GS}=0V$, $I_D=250\mu A$
$I_{D(Devic\ Ref)}$	Continuous Drain Current			4	A	$T_J=25^\circ\text{C}$
$R_{DS(on)}(CP)$	Static Drain-to-Source On-Resistance		15	19,5	mΩ	$V_{GS}=4.5V$, $I_D=1A$
			21	28	mΩ	$V_{GS}=2.5V$, $I_D=1A$
$R_{DS(on)}(FT)$	Static Drain-to-Source On-Resistance		18	22.5	mΩ	$V_{GS}=4.5V$, $I_D=3A$
			24	31	mΩ	$V_{GS}=2.5V$, $I_D=2A$
$V_{GS(th)}$	Gate Threshold Voltage	0.45	0.75	1.05	V	$V_{DS}=V_{GS}$, $I_D=250\mu A$
I_{DSS}	Drain-to-Source Leakage Current			1	µA	$V_{DS}=18V$, $V_{GS}=0V$
I_{GSS}	Gate-to-Source Leakage Current			±100	nA	$V_{GS}=\pm 10V$, $V_{DS}=0V$
T_J, T_{STG}	Operating and Storage Temperature	-55°C to 150°C Max				

4. Die Outline

	Die Size: 926µm × 575µm (including scribe line)
	Gate: 118µm × 114µm
	For SOT23-6 package Suggest Bonding wire: Gate: 1 × 1.0 mil Cu *2 Source: 5 × 1.2 mil Cu *2