X0120E

N-Channel Enhancement Mode MOSFET

60V(VDS) / ±20V(VGS) / 0.3A(ID)

Rev0.2

Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8'' wafer
X0120E	**60V(V_{DS}) / ±20V(V_{GS}) /0.3A(I_D) /2KV(HBM)** **N-Channel Enhancement Mode MOSFET**	297,682

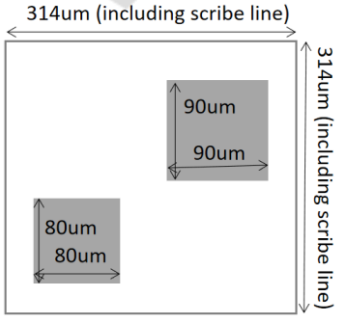
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag-Sn (1kA°-2kA°-10kA°-23kA°)
Nominal Front Metal Composition, Thickness	AlCu (4μm)
Wafer Diameter	200mm, with 010 notch
Wafer Thickness	150±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	60	-	-	V	V_{GS}=0V, I_D=250μA
I_D (Device Ref)	Continuous Drain Current	-	-	0.3	A	T_J=25℃
$R_{DS(on)}$(FT)	Static Drain-to-Source On-Resistance	-	1.7	2.2	mΩ	V_{GS}=10V, I_D=0.3A
		-	2.1	2.6	mΩ	V_{GS}=4.5V, I_D=0.2A
$V_{GS(th)}$	Gate Threshold Voltage	1	1.6	2.5	V	V_{DS}=V_{GS}, I_D=250μA
I_{DSS}	Drain-to-Source Leakage Current	-	-	1	μA	V_{DS}=60V, V_{GS}=0V
I_{GSS}	Gate-to-Source Leakage Current	-	-	±10	μA	V_{GS}=±20V, V_{DS}=0V
C_{iss}	Input Capacitance	-	25	-	pF	V_{DS} =30V,V_{GS} =0V, f=1MHz
C_{oss}	Output Capacitance	-	11	-	pF	
C_{rss}	Reverse Transfer Capacitance	-	6	-	pF	
T_J, T_{STG}	Operating and Storage Temperature	-55℃ to 150℃ Max				

4. Die Outline



Die Size: 314μm ×314μm (including scribe line)

Gate: 80μm × 80μm

For SOT-23 package

Suggest Bonding wire:

Gate: 1*25μm Cu

Source: 1*25μm Cu