

X1098

N-Channel Enhancement Mode MOSFET

14V(VDS) / ± 12 V(VGS) / 2A(ID)

Rev0.4



Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
X1098	14V(V_{DS}) / ±12V(V_{GS}) / 2A(I_D) N-Channel Enhancement Mode MOSFET	180,000

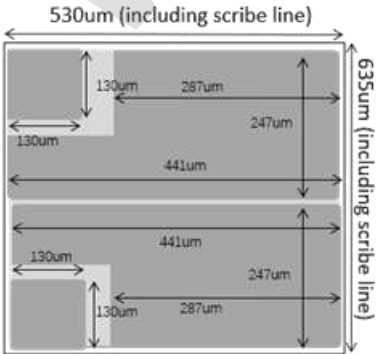
2. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag (1kÅ°-3kÅ°-8kÅ°)
Nominal Front Metal Composition, Thickness	AlCu (4μm)
Wafer Diameter	200mm, with 010 notch
Wafer Thickness	110±10μm
Scribe Line Width	60μm
Passivation	SRO+SiN

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

Parameter	Description	Min.	Typ.	Max.	Unit	Test Conditions
V _{(BR)DSS}	Drain-to-Source Breakdown Voltage	14	17		V	V _{GS} =0V, I _D =250μA
I _D (Device Ref)	Continuous Drain Current			2	A	T _J =25°C
R _{DS(on)} (CP)	Static Drain-to-Source On-Resistance		20	25	mΩ	V _{GS} =4.5V, I _D =1A
			26	39	mΩ	V _{GS} =2.5V, I _D =1A
R _{DS(on)} (FT)	Static Drain-to-Source On-Resistance		23	28	mΩ	V _{GS} =4.5V, I _D =1A
			29	42	mΩ	V _{GS} =2.5V, I _D =1A
V _{GS(th)}	Gate Threshold Voltage	0.3	0.7	1.0	V	V _{DS} =V _{GS} , I _D =250μA
I _{DSS}	Drain-to-Source Leakage Current			1	μA	V _{DS} =14V, V _{GS} =0V
I _{GSS}	Gate-to-Source Leakage Current			±100	nA	V _{GS} =±10V, V _{DS} =0V
T _J , T _{STG}	Operating and Storage Temperature	-55°C to 150°C Max				

4. Die Outline

	Die Size: 530μm × 635μm (including scribe line)
	Gate: 130μm × 130μm
	For SOT23-6 package Suggest Bonding wire: Gate: 1 × 42 um Cu *2 Source: 5 × 42 um Cu *2 