Power Field Effect Transistor Chip Data Sheet

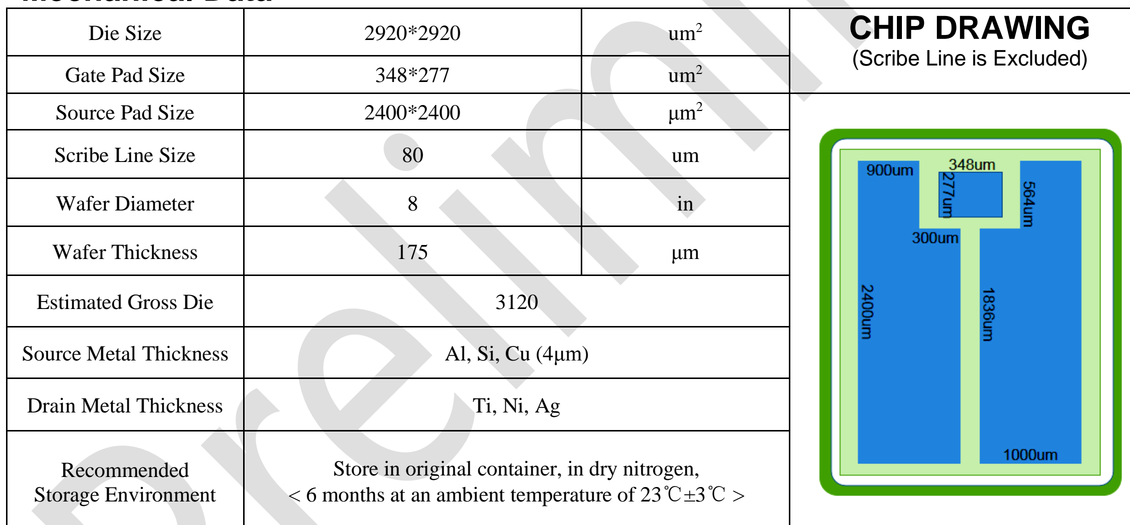
FEATURES

·Robust High Voltage Termination
·Avalanche Energy Specified
·Source-to-Drain Diode Recovery Time Comparable to a Discrete Fast Recovery Diode
·Diode is Characterized for Use in Bridge Circuits

Electrical Characteristics (Tj=25℃)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	500	—	—	V	V_{GS}=0V ， I_D=250uA
$R_{DS(on)}$ *	Static Drain-Source On-Resistance	—	—	190	mΩ	V_{GS}=10V， I_D = 6 A**
$V_{GS(th)}$	Gate Threshold Voltage	2	—	4	V	V_{GS}=V_{DS}， I_D=250uA
I_{DSS}	Drain-Source Leakage Current	—	—	10	uA	V_{DS}=500V， V_{GS}=0V
I_{GSS}	Gate-Source Leakage Current	—	—	100	nA	V_{GS}=30V， V_{DS}=0V
T_J, T_{STG}	Operating and Storage Temperature Range	-55℃ to 150℃ Max				
** Pulse width < 300 uS, Duty cycle < 2%						

Mechanical Data



Die Size	2920*2920	um^2
Gate Pad Size	348*277	um^2
Source Pad Size	2400*2400	μm^2
Scribe Line Size	80	um
Wafer Diameter	8	in
Wafer Thickness	175	μm
Estimated Gross Die	3120	
Source Metal Thickness	Al, Si, Cu (4μm)	
Drain Metal Thickness	Ti, Ni, Ag	
Recommended Storage Environment	Store in original container, in dry nitrogen, < 6 months at an ambient temperature of 23℃±3℃ >	

CHIP DRAWING
(Scribe Line is Excluded)

Preliminary

* Electrical characteristics are reported for the reference packaged part (TO-247) ,Variations in customer packaging materials, dimensions and processes may affect parametric performance.