

XG0081(XG6012)

N-Channel Enhancement Mode SGT MOSFET

60V(VDS) / ± 20 V(VGS) / 70A(ID)

Rev0.5

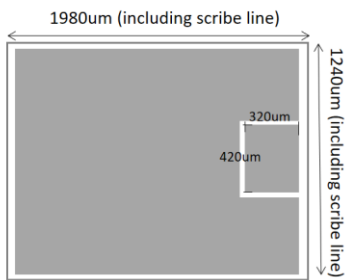
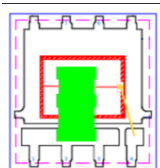


Wafer Specification

1. Order Information

Part No.	Description	Gross die / per 8" wafer
XG0081(XG6012)	60V(V_{DS}) / $\pm 20V(V_{GS})$ / 70A(I_D) N-Channel Enhancement Mode SGT MOSFET	11,680

2. Physical Characteristics

	Die Size: 1980 μ m $\times$ 1240 μ m (including scribe line)
	Gate: 320 μ m $\times$ 420 μ m
	For PDFN5*6 package Suggest Bonding wire: Gate: 1x1.7mil PdCu Source: 40x4 mil Ribbon Dual Touch 

3. Mechanical Data

Nominal Back Metal Composition, Thickness	Ti-Ni-Ag (13kA°)
Nominal Front Metal Composition, Thickness	AlCu (4 μ m)
Wafer Diameter	200mm, with 010 notch
Wafer Thickness	150 μ m
Scribe Line Width	60 μ m

4. Key Electrical Characteristics of Die (at $T_J = 25^\circ\text{C}$, unless otherwise specified)S

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			70	A	T _J =25°C
R _{DS(on)} (FT)	Static Drain-to-Source On-Resistance		7.1	8	mΩ	V _{GS} =10V, I _D =20A
V _{GS(th)}	Gate Threshold Voltage	1.3	1.8	2	V	V _{DS} =V _{GS} , I _D =250μA
I _{DSS}	Drain-to-Source Leakage Current			1	μA	V _{DS} =100V, V _{GS} =0V
I _{GSS}	Gate-to-Source Leakage Current			±10 0	nA	V _{GS} =±20V, V _{DS} =0V
E _{AS}	Single Pulsed Avalanche Energy			780	mJ	L=0.5mH, VDD=30V, VG=10V
R _g	Gate Poly Resistance		1.8		Ω	V _{DS} =0V, V _{GS} =0,f=1MHZ
C _{iSS}	Input Capacitance		1200		pF	V _{DS} =30V, V _{GS} =0, f=1MHZ
C _{oSS}	Output Capacitance		550		pF	
C _{rSS}	Reverse Transfer Capacitance		50		pF	
T _J , T _{STG}	Operating and Storage Temperature	-55°C to 150°C Max				

