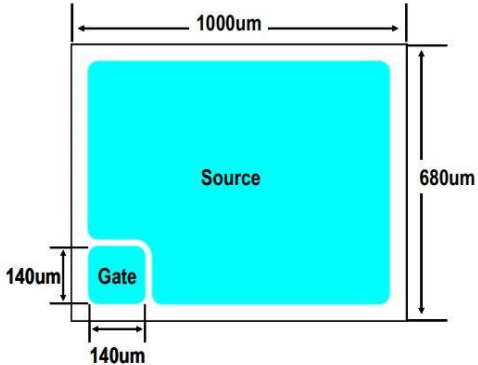


MOSFET Metal-Oxide-Semiconductor Field-Effect Transistor
20V P-Channel MOSFET

Bonding Pad Information		Chip Information	
		Die Size (with Scribe Line)	1,050μm x 730μm
		Gate Pad Size	140μm x 140μm
		Source Pad Size	Full metalized surface of source region
		Scribe Line Size	50μm
		Wafer Size	6inches
		Wafer Thickness	6mils
		Metallization	Front Side: Al/Si/Cu : 4μm
			Back Side: Ti/Ni/Ag : 1.4μm
		Recommended Wire Bonding	
		Gate Pad	1.65 mil x 1 (Cu wire)
		Source Pad	1.65 mil x 5 (Cu wire)
		Gross Die	20,000ea

Maximum Ratings (TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Drain-Source Voltage	V _{DSS}	-20	V
Gate-Source Voltage	V _{GSS}	±8	V
Drain Current-Continuous @ T _C =25°C	I _D	-3.5	A
Drain Current-Pulsed	I _{DM}	-12	A
Operating Junction Temperature Range	T _J	-55 to +150	°C

Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
OFF CHARACTERISTIC						
Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} =0V, I _D =-250uA	-20	-	-	V
Drain-Source Leakage Current	I _{DSS}	V _{GS} =0V, V _{DS} =-16V	-	-	-1	uA
Gate-Source Leakage Current	I _{GSS}	V _{GS} =±8V, V _{DS} =0V	-	-	±10	uA
ON CHARACTERISTIC						
Gate Threshold Voltage	V _{GS(TH)}	V _{GS} =V _{DS} , I _D =-250uA	-0.3	-0.6	-0.9	V
Static Drain-Source On-Resistance	R _{DS(ON)}	V _{GS} =-4.5V, I _D =-1A	-	34	42	mΩ
		V _{GS} =-2.5V, I _D =-1A	-	50	60	
DYNAMIC CHARACTERISTICS						
Input Capacitance	C _{iss}	V _{GS} =0V, V _{DS} =-10V, f=1MHz	-	750	-	pF
Output Capacitance	C _{oss}		-	110	-	
Reverse Transfer Capacitance	C _{rss}		-	80	-	
DRAIN-SOURCE DIODE CHARACTERISTICS AND MAXIMUM RATINGS						
Drain-Source Diode Forward Voltage	V _{SD}	V _{GS} =0V, I _S =-1A	-	-0.7	-	V

NOTE:

- The data tested by pulsed, pulse with ≤ 300us, duty cycle ≤ 2%.
- R_{DS(ON)} calculated by SOT-23-3L package type.
- ESD protected 2kV for SOT-23-3L package type.