

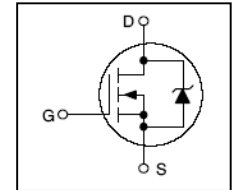
Power MOSFET Wafer Datasheet

FEATURES

- Die in 8" Wafer Form
- 20V, 6A*, N-channel
- 100% Tested at Probe

APPLIATION

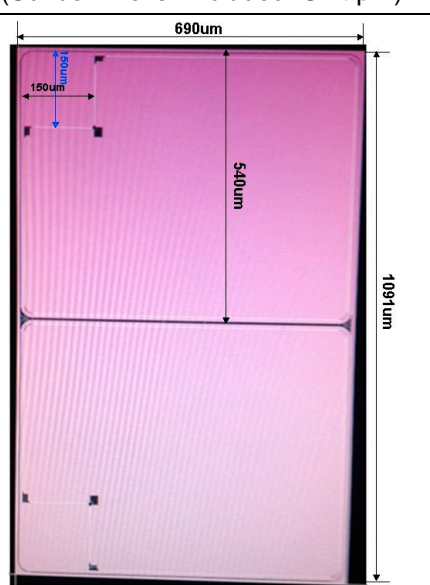
- Battery protection
- Load switch
- Power management



Electrical Characteristics of C/P test (T_J=25°C)

Parameter	Description	Min.	Typ.	Max.	Unit	Test Condition
V _{(BR)DSS}	Drain-Source Breakdown Voltage	20	—	—	V	V _{GS} =0V, I _D =250μA
R _{DS(ON)}	Static Drain-Source On-Resistance	—	—	19.5	mΩ	V _{GS} =4.5V, I _D =1A **
		—	—	27.5	mΩ	V _{GS} =2.5V, I _D =1A **
V _{GS(th)}	Gate Threshold Voltage	0.55	—	0.95	V	V _{DS} =V _{GS} , I _D =250μA
I _{DSS}	Drain-to-Source Leakage Current	—	—	1	μA	V _{DS} =20V, V _{GS} =0V
I _{GSS}	Gate-Body Leakage Current	—	—	±100	nA	V _{DS} =0V, V _{GS} =±12V
T _J , T _{STG}	Operating and Storage Temperature Range	-55°C to 150°C Max				

Mechanical Data

Die Size	750 × 1151(dual die)	um ²	<h3>Chip Drawing</h3> <p>(Scribe Line is Excluded. Unit:μm)</p> 
Gate Pad Size	150× 150		
Scribe Line Size	60	μm	
Wafer Diameter	200	mm	
Wafer Thickness	185	μm	
Flat Position	90	deg	
Source Metallization	Al, Cu		
Drain Metallization	Ti, Ni, Ag		
Recommended Storage Environment	Store in original container, in dry nitrogen, < 6 months at an ambient temperature of 23°C±3°C >		

* Values will be influenced by measurement and package.

** Pulse Test: Pulse width ≤300μs, Duty cycle ≤ 2%.



Disclaimers:

CSMC has made reasonable commercial efforts to ensure that the information given in this data sheet is correct. However, it must clearly be understood that such information is for guidance only and does not constitute any representation or form part of any offer or contract.

For documents and material available from this data sheet, CSMC does not warrant or assume any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, product, technology or process disclosed hereunder.

CSMC reserves the rights to at its own discretion to make any changes or improvements to this data sheet. Unless said data sheet is incorporated into the formal contract, any customer should not rely on the information as any specification or product parameters duly committed by CSMC. Customers are hereby advised to verify that the information contained herein is current and complete before the entering of any contract or acknowledgement of any purchase order. Accordingly, all products specified hereunder shall be sold subject to CSMC's terms and conditions supplied at the time of order acknowledgement. Except where agreed upon by contractual agreement, testing of all parameters of each product is not necessarily performed.

CSMC does not warrant or convey any license either expressed or implied under its patent rights, nor the rights of others. Reproduction of information contained herein shall be only permissible if such reproduction is without any modification or alteration. Reproduction of this information with any alteration is an unfair and deceptive business practice. CSMC is not responsible or liable for such altered documentation.

Resale of CSMC's products with statements different from or beyond the parameters stated by CSMC for that product or service voids all express or implied warranties for the associated CSMC's product or service and is unfair and deceptive business practice. CSMC is not responsible or liable for any such statements.

CSMC's products are not authorized for use as critical components in life support devices or systems without the express written approval of CSMC. As used herein:

1. Life support devices or systems are devices or systems which, (a) are intended for surgical implant into the body, or (b) support or sustain life, and whose failure to perform, when properly used in accordance with instructions for use provided in the labeling, can be reasonably expected to result in a significant injury to the user.
2. A critical component is any component of a life support device or system whose failure to perform can be reasonably expected to cause the failure of the life support device or system, or to affect its safety or effectiveness.