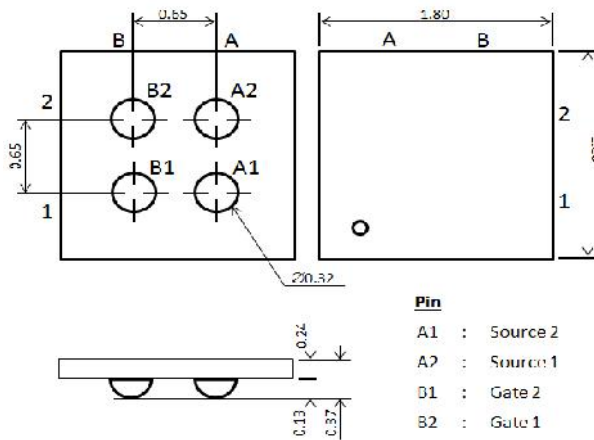
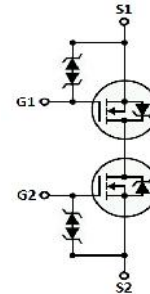


YGMOS Technology Corp.

20V N-Channel Enhancement-Mode MOSFET 20V N 沟道增强型 MOS 管

$V_{DS} =$	20 V		
$R_{SS(on)max}, V_{GS}@$	4.5V	, $I_D@$	3A = 24.0 m
$R_{SS(on)max}, V_{GS}@$	4.0V	, $I_D@$	3A = 25.2 m
$R_{SS(on)max}, V_{GS}@$	3.7V	, $I_D@$	3A = 27.5 m
$R_{SS(on)max}, V_{GS}@$	3.1V	, $I_D@$	3A = 31.2 m
$R_{SS(on)max}, V_{GS}@$	2.5V	, $I_D@$	3A = 38.8 m

Unit: mm (typ)


Internal Schematic Diagram

N-Channel MOSFET
Physical Characteristics

- Package type: CSP
- Die size: 1800 X 1800um
- Die thickness: 370um
- Solder ball diameter: 320um
- ESD Protection: 2000V

Features

- Advanced trench process technology
- High Density Cell Design For Ultra Low On-Resistance
- ESD Protection

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

Parameter	Symbol	Limit	Unit
Drain-Source Voltage	V_{DS}	20	V
Gate-Source Voltage	V_{GS}	± 12	
Continuous Drain Current	I_D	TBD	A
Pulsed Drain Current	I_{DM}	TBD	
Operating Junction and Storage Temperature Range	T_J, T_{stg}	TBD	°C

Note:

1. Fused current that based on wire numbers and diameter
2. Repetitive Rating: Pulse width limited by the maximum junction temperature
3. 1-in2 2oz Cu PCB board

ELECTRICAL CHARACTERISTICS

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS} = 0V, I_S = 250\mu A$	20			V
Source-Source On-State Resistance	$R_{SS(on)}$	$V_{GS} = 4.5V, I_S = 3A$		20.0	24.0	m
		$V_{GS} = 4.0V, I_S = 3A$		21.0	25.2	
		$V_{GS} = 3.7V, I_S = 3A$		22.0	27.5	
		$V_{GS} = 3.1V, I_S = 3A$		24.0	31.2	
		$V_{GS} = 2.5V, I_S = 3A$		28.0	38.8	
Gate Threshold Voltage	$V_{GS(off)}$	$V_{SS} = V_{GS}, I_S = 250\mu A$	0.5	0.8	1.3	V
Zero Gate Voltage Source Current	I_{SSS}	$V_{SS} = 20V, V_{GS} = 0V$			1	μA
Gate Body Leakage	I_{GSS}	$V_{GS} = \pm 12V, V_{SS} = 0V$			± 10	μA
Source-Drain Diode						
Diode Forward Voltage	V_{SD}	$I_S = 1.0A, V_{GS} = 0V$			1.5	V

Test Circuits:
