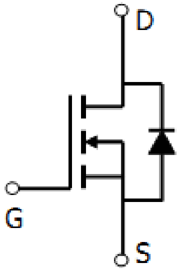
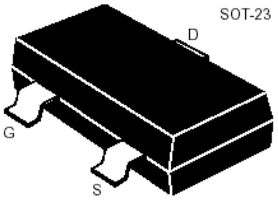
NINGBO KLS ELECTRONIC CO.,LTD

GML2502

SOT-23 場效應晶體管(SOT-23 Field Effect Transistors)





N-Channel Enhancement-Mode MOS FETs

N 沟道增强型 MOS 场效应管

■MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Max 最大値	Unit 單位
Drain-Source Voltage 漏極-源極電壓	BV_{DSS}	20	V
Gate- Source Voltage 柵極-源極電壓	V_{GS}	±12	V
Drain Current (continuous) 漏極電流-連續	I_D	4.2	A
Drain Current (pulsed) 漏極電流-脉冲	I_{DM}	16	A
Total Device Dissipation 總耗散功率 T_A=25℃環境溫度爲 25℃	P_D	1250	mW
Junction 結溫	T_J	150	℃
Storage Temperature 儲存溫度	T_{stg}	-55to+150	℃

■DEVICE MARKING 打標

GML2502=1G

■ELECTRICAL CHARACTERISTICS 電特性

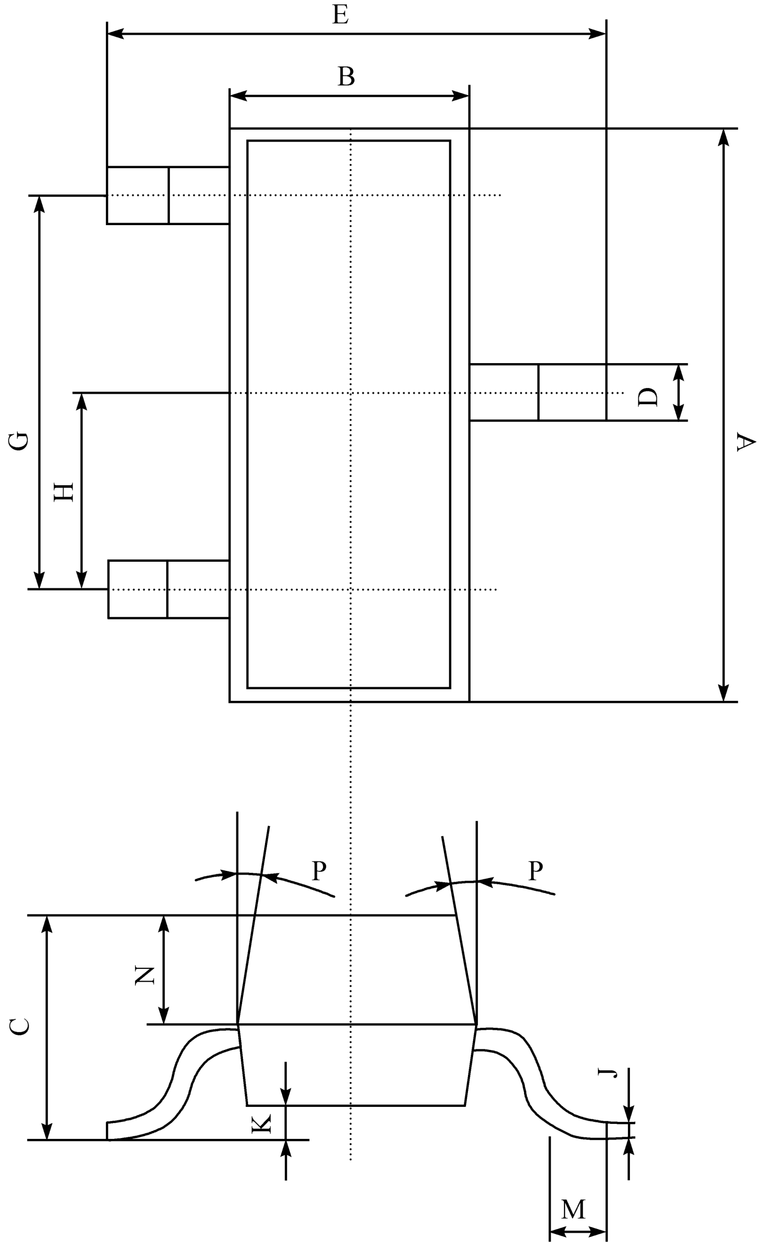
(T_A=25℃ unless otherwise noted 如無特殊說明，溫度爲 25℃)

Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓(I_D = 250uA,V_{GS}=0V)	BV_{DSS}	20	—	—	V
Gate Threshold Voltage 柵極開启電壓(I_D =250uA,V_{GS}= V_{DS})	$V_{GS(th)}$	0.6	—	1.2	V
Diode Forward Voltage Drop 內附二極管正向壓降(I_S=1.3A,V_{GS}=0V)	V_{SD}	—	—	1.2	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V_{GS}=0V, V_{DS}= 16V) (V_{GS}=0V, V_{DS}= 16V, T_A=70℃)	I_{DSS}	—	—	1 25	uA
Gate Body Leakage 柵極漏電流(V_{GS}=±12V, V_{DS}=0V)	I_{GSS}	—	—	±100	nA
Static Drain-Source On-State Resistance 静态漏源導通電阻(I_D= 4.2A,V_{GS}= 4.5V)	$R_{DS(ON)}$	—	35	45	mΩ
Static Drain-Source On-State Resistance 静态漏源導通電阻(I_D= 3.6A,V_{GS}= 2.5V)	$R_{DS(ON)}$	—	50	80	mΩ
Input Capacitance 輸入電容 (V_{GS}=0V, V_{DS}= 15V,f=1MHz)	C_{ISS}	—	740	—	pF
Output Capacitance 輸出電容 (V_{GS}=0V, V_{DS}= 15V,f=1MHz)	C_{OSS}	—	90	—	pF
Turn-ON Time 开启時間 (V_{DS}= 10V, I_D= 1A, R_{GEN}=6Ω)	$t_{(on)}$	—	8	—	ns
Turn-OFF Time 关断時間 (V_{DS}= 10V, I_D= 1A, R_{GEN}=6Ω)	$t_{(off)}$	—	60	—	ns

Pulse Width≤300μs; Duty Cycle≤2.0%

■DIMENSION 外形封裝尺寸

單位(UNIT)：mm



序號	數值及公差
A	2.90±0.10
B	1.30±0.10
C	1.00±0.10
D	0.40±0.10
E	2.40±0.20
G	1.90±0.10
H	0.95±0.05
J	0.13±0.05
K	0.00-0.10
M	⩾0.2
N	0.60±0.10
P	7±2°