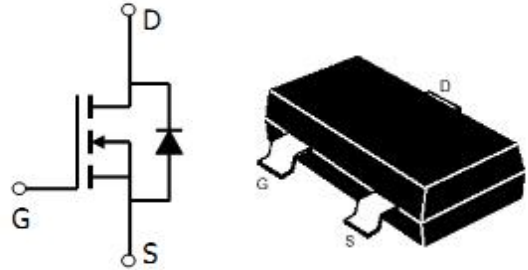




GM2100

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



N-Channel Enhancement-Mode MOS FETs

N 溝道增強型 MOS 場效應管

■MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Rat 額定值	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}	± 10	V
Drain Current (continuous) 漏極電流 - 連續	I_D	10	A
Drain Current (pulsed) 漏極電流 - 脈沖	I_{DM}	20	A
Total Device Dissipation 總耗散功率 $T_A=25^{\circ}C$ 環境溫度為 $25^{\circ}C$	P_D	1400	mW
Junction 結溫	T_J	150	$^{\circ}C$
Solder Temperature/Solder Time 焊接溫度/焊接時間	T/t	260/10	$^{\circ}C/S$
Storage Temperature 儲存溫度	T_{stg}	-55to+150	$^{\circ}C$

■DEVICE MARKING 打標

GM2100=2100

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■ELECTRICAL CHARACTERISTICS 電特性

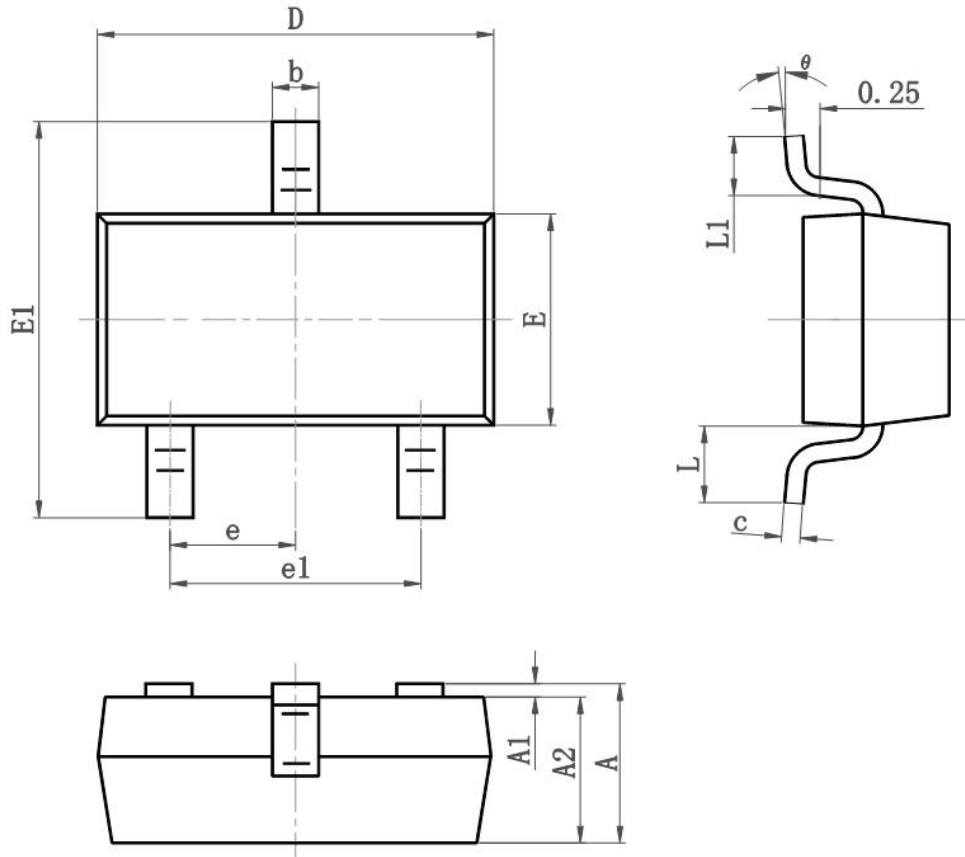
 (T_A=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

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 柵極開啓電壓(I _D =250uA, V _{GS} = V _{DS})	V _{GS(th)}	0.5	—	1.0	V
Diode Forward Voltage Drop 內附二極管正向壓降(I _S =1A, V _{GS} =0V)	V _{SD}	—	—	1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V _{GS} =0V, V _{DS} =16V)	I _{DSS}	—	—	1	uA
Gate Body Leakage 柵極漏電流(V _{GS} =±10V, V _{DS} =0V)	I _{GSS}	—	—	±100	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = 6A, V _{GS} = 4.5V)	R _{DS(ON)}	—	10	12	mΩ
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I _D = 4.5A, V _{GS} = 2.5V)	R _{DS(ON)}	—	12	16	mΩ
Input Capacitance 輸入電容 (V _{GS} =0V, V _{DS} = 10V, f=1MHz)	C _{ISS}	—	600	—	pF
Output Capacitance 輸出電容 (V _{GS} =0V, V _{DS} = 10V, f=1MHz)	C _{OSS}	—	120	—	pF
Turn-ON Time 開啓時間 (V _{DS} = 10V, I _D = 3A, R _{GEN} =6Ω)	t _(on)	—	8	—	ns
Turn-OFF Time 關斷時間 (V _{DS} = 10V, I _D = 3A, R _{GEN} =6Ω)	t _(off)	—	60	—	ns

Pulse Width≤300 μs; Duty Cycle≤2.0%

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■DIMENSION 外形封裝尺寸



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.500	1.700	0.059	0.067
E1	2.250	2.550	0.089	0.100
e	0.950TYP		0.037TYP	
e1	1.800	2.000	0.071	0.079
L	0.550REF		0.022REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	6°