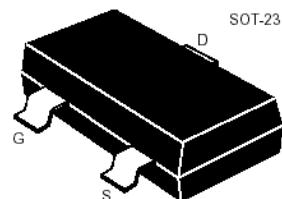


BSS84

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



### P-Channel Enhancement-Mode MOS FETs

**P 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 最大值	Unit 單位
Drain-Source Voltage 漏極-源極電壓	$BV_{DSS}$	-50	V
Gate- Source Voltage 柵極-源極電壓	$V_{GS}$	$\pm 20$	V
Drain Current (continuous) 漏極電流-連續	$I_{DR}$	-130	mA
Drain Current (pulsed) 漏極電流-脉沖	$I_{DRM}$	-520	mA

#### ■THERMAL CHARACTERISTICS 热特性

Characteristic 特性	Symbol 符號	Max 最大值	Unit 單位
Total Device Dissipation 總耗散功率 $T_A=25^\circ\text{C}$ 環境溫度為 $25^\circ\text{C}$	$P_D$	200	mW
Derate above $25^\circ\text{C}$ 超過 $25^\circ\text{C}$ 遷減		1.8	$\text{mW}/^\circ\text{C}$
Thermal Resistance Junction to Ambient 热阻	$R_{\Theta JA}$	350	$^\circ\text{C}/\text{W}$
Junction and Storage Temperature 結溫和儲存溫度	$T_J, T_{stg}$	150°C, -55 to +150°C	



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**■DEVICE MARKING 打標****BSS84=SP****■ELECTRICAL CHARACTERISTICS 電特性**(T<sub>A</sub>=25°C unless otherwise noted 如無特殊說明，溫度為 25°C)

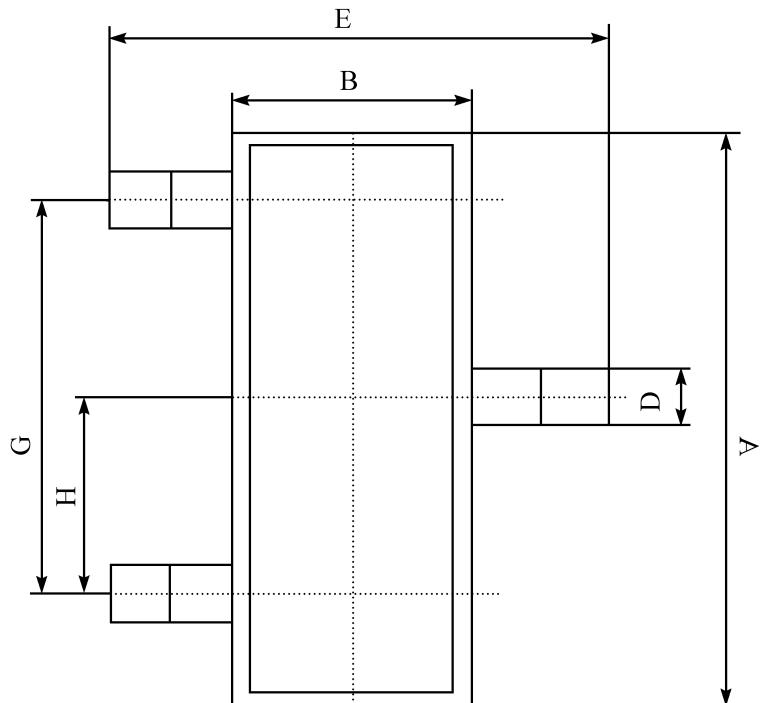
Characteristic 特性參數	Symbol 符號	Min 最小值	Typ 典型值	Max 最大值	Unit 單位
Drain-Source Breakdown Voltage 漏極-源極擊穿電壓(I <sub>D</sub> =-250uA,V <sub>GS</sub> =0V)	BV <sub>DSS</sub>	-50	—	—	V
Gate Threshold Voltage 柵極開啓電壓(I <sub>D</sub> =-250uA,V <sub>GS</sub> =V <sub>DS</sub> )	V <sub>GS(th)</sub>	-1.0	—	-2.5	V
Diode Forward Voltage Drop 內附二極管正向壓降(I <sub>SD</sub> =-200mA,V <sub>GS</sub> =0V)	V <sub>SD</sub>	—	—	-1.5	V
Zero Gate Voltage Drain Current 零柵壓漏極電流(V <sub>GS</sub> =0V, V <sub>DS</sub> =-50V) (V <sub>GS</sub> =0V, V <sub>DS</sub> =-50V, T <sub>A</sub> =125°C)	I <sub>DSS</sub>	—	—	-15 -60	uA
Gate Body Leakage 柵極漏電流(V <sub>GS</sub> =±20V, V <sub>DS</sub> =0V)	I <sub>GSS</sub>	—	—	±10	nA
Static Drain-Source On-State Resistance 靜態漏源導通電阻(I <sub>D</sub> =-100mA,V <sub>GS</sub> =-5V)	R <sub>DS(ON)</sub>	—	—	10	Ω
Input Capacitance 輸入電容 (V <sub>GS</sub> =0V, V <sub>DS</sub> =-25V,f=1MHz)	C <sub>ISS</sub>	—	73	—	pF
Common Source Output Capacitance 共源輸出電容(V <sub>GS</sub> =0V, V <sub>DS</sub> =-25V,f=1MHz)	C <sub>OSS</sub>	—	10	—	pF
Turn-ON Time 开啓時間 (V <sub>DS</sub> =-30V, I <sub>D</sub> =-270mA, R <sub>GEN</sub> =6Ω)	t <sub>(on)</sub>	—	—	5	ns
Turn-OFF Time 關斷時間 (V <sub>DS</sub> =-30V, I <sub>D</sub> =-270mA, R <sub>GEN</sub> =6Ω)	t <sub>(off)</sub>	—	—	20	ns
Reverse Recovery Time 反向恢復時間 (I <sub>SD</sub> =-100mA, V <sub>GS</sub> =0V)	t <sub>rr</sub>	—	10	—	ns

- FR-5=1.0×0.75×0.062in.
- Alumina=0.4×0.3×0.024in.99.5%alumina.
- Pulse Width≤300 μ s; Duty Cycle≤2.0%.

BSS84

**DIMENSION 外形封裝尺寸**

單位(UNIT): mm



序號	數值及公差
A	$2.90 \pm 0.10$
B	$1.30 \pm 0.10$
C	$1.00 \pm 0.10$
D	$0.40 \pm 0.10$
E	$2.40 \pm 0.20$
G	$1.90 \pm 0.10$
H	$0.95 \pm 0.05$
J	$0.13 \pm 0.05$
K	$0.00-0.10$
M	$\geq 0.2$
N	$0.60 \pm 0.10$
P	$7 \pm 2^\circ$

