



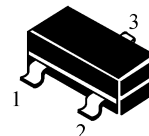
桂林斯壯微電子有限責任公司

Guilin Strong Micro-Electronics Co.,Ltd.

GM9012

SOT-23

- 1. BASE
- 2. EMITTER
- 3. COLLECTOR



■FEATURES 特點

Excellent H_{FE} Linearity H_{FE} 線性特性極好

$h_{FE}(2)=25(\text{Min.})$ at $V_{CE}=6V, I_C=400mA$.

Complementary to GM9013 与 GM9013 互补

■MAXIMUM RATINGS 最大額定值($T_a=25^{\circ}C$)

Characteristic 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Collector-Base voltage 集電極-基極電壓	V_{CBO}	-40	Vdc
-Collector-Emitter Voltage 集電極-發射極電壓	V_{CEO}	-30	Vdc
Emitter-Base voltage 發射極-基極電壓	V_{EBO}	-5.0	Vdc
Collector Current-Continuous 集電極電流-連續	I_C	-500	mAdc
Base-Current 基極電流	I_B	-50	mAdc
Collector Power Dissipation 集電極耗散功率	P_C	300	mW
Junction Temperature 結溫	T_j	150	$^{\circ}C$
Storage Temperature Range 儲存溫度	T_{stg}	-55~150	$^{\circ}C$

■DEVICE MARKING 打標

GM9012=2T1



GM9012

■ELECTRICAL CHARACTERISTICS 電特性

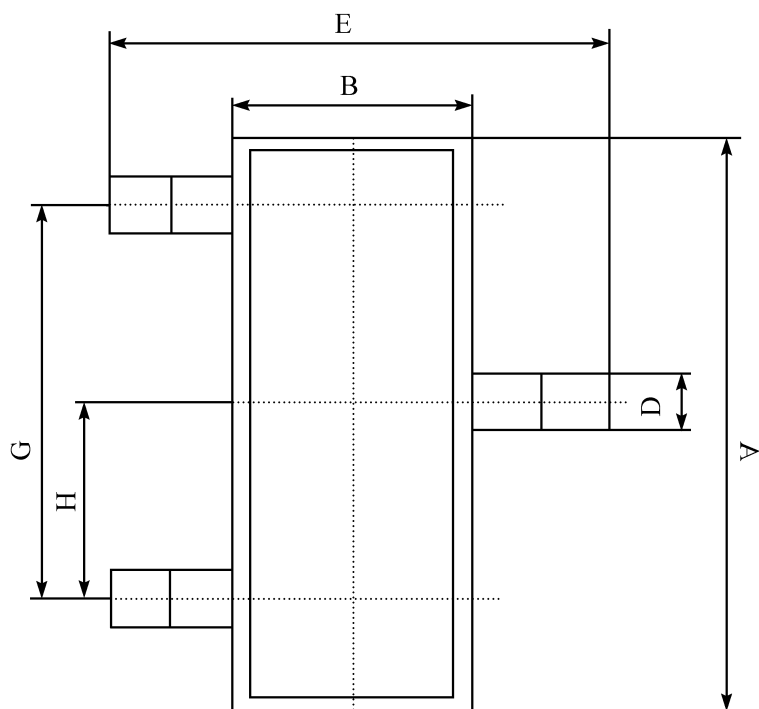
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如無特殊說明，溫度為 25°C)

Characteristic 特性參數	Symbol 符號	Test Condition 測試條件	Min 最小值	TYP 典型值	Max 最大值	Unit 單位
Collector Cutoff Current 集電極截止電流	I_{CBO}	$V_{CB} = -35\text{V}, I_E = 0$	—	—	-0.1	μA
Emitter Cutoff Current 發射極截止電流	I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$	—	—	-0.1	μA
Collect-Base Breakdown Voltage 集電極-基極擊穿電壓	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}$	-40	—	—	V
Collect-Base Breakdown Voltage 集電極-基極擊穿電壓	$V_{(BR)CEO}$	$I_C = -1.0\text{mA}$	-30	—	—	V
Emitter-Base Breakdown Voltage 發射極-基極擊穿電壓	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}$	-5	—	—	V
DC Current Gain 直流電流增益	$h_{FE}(1)$	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	70	—	400	—
	$h_{FE}(2)$	$V_{CE} = -6\text{V}, I_C = -400\text{mA}$	25	—	—	
Collector-Emitter Saturation Voltage 集電極-發射極飽和壓降	$V_{CE(sat)}$	$I_C = -500\text{mA}, I_B = -50\text{mA}$	—	—	-0.6	V
Base-Emitter Saturation Voltage 基極-發射極電壓	V_{BE}	$V_{CE} = -1\text{V}, I_C = -100\text{mA}$	—	-0.8	-1.0	V
Transition Frequency 特徵頻率	f_T	$V_{CE} = -6\text{V}, I_C = -20\text{mA}$	150	300	—	MHz
Collector Output Capacitance 輸出電容	C_{ob}	$V_{CB} = -6\text{V}, I_E = 0, f = 1\text{MHz}$	—	7.0	10	pF



GM9012

■DIMENSION 外形封裝尺寸



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	$7 \pm 2^\circ$

