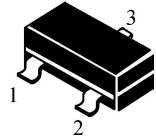


S9012

SOT-23

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



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

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	$^{\circ}\text{C}$
Storage Temperature Range 儲存溫度	T_{stg}	-55~150	$^{\circ}\text{C}$

■ DEVICE MARKING 打標

S9012=2T1

HFE:200-300



S9012

■ ELECTRICAL CHARACTERISTICS 電特性

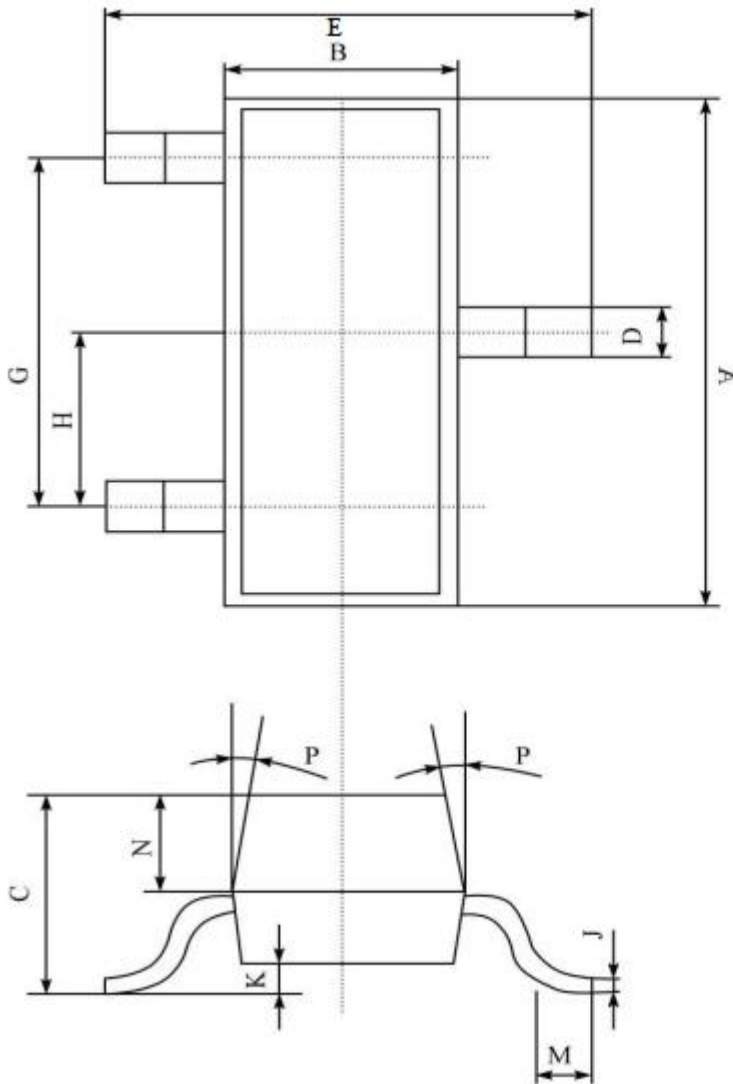
($T_A=25^{\circ}\text{C}$ unless otherwise noted 如無特殊說明，溫度為 25°C)

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

S9012

■ DIMENSION 外形封裝尺寸

單位(UNIT): mm



代碼	範圍(單位:mm)
A	2.80~3.00
B	1.20~1.40
C	0.90~1.10
D	0.30~0.50
E	2.20~2.60
G	1.80~2.00
H	0.90~1.00
J	0.08~0.18
K	0.02~0.12
M	≥0.22
N	0.50~0.70
P	6°~10°