



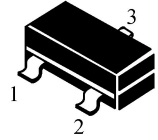
# 桂林斯壯微電子有限責任公司

## Guilin Strong Micro-Electronics Co.,Ltd.

GMC1623(銷售型號 2SC1623)

SOT-23

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



### ■FEATURES 特點

NPN General Purpose Transistor

### ■MAXIMUM RATINGS 最大額定值

Characteristic 特性參數	Symbol 符號	Rating 額定值	Unit 單位
Collector-Emitter Voltage 集電極-發射極電壓	$V_{CEO}$	50	Vdc
Collector-Base Voltage 集電極-基極電壓	$V_{CBO}$	60	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	$I_c$	100	mAdc

### ■THERMAL CHARACTERISTICS 熱特性

Characteristic 特性參數	Symbol 符號	Max 最大值	Unit 單位
Total Device Dissipation 總耗散功率 FR-5 Board(1) $T_A=25^{\circ}\text{C}$ 環境溫度為 $25^{\circ}\text{C}$ Derate above $25^{\circ}\text{C}$ 超過 $25^{\circ}\text{C}$ 遞減	$P_D$	225 1.8	mW mW/ $^{\circ}\text{C}$
Total Device Dissipation 總耗散功率 Alumina Substrate 氧化鋁襯底,(2) $T_A=25^{\circ}\text{C}$ Derate above $25^{\circ}\text{C}$ 超過 $25^{\circ}\text{C}$ 遞減	$P_D$	300 2.4	mW mW/ $^{\circ}\text{C}$
Thermal Resistance Junction to Ambient 熱阻	$R_{\theta JA}$	417	$^{\circ}\text{C}/\text{W}$
Junction and Storage Temperature 結溫和儲存溫度	$T_J, T_{stg}$	-55to+150 $^{\circ}\text{C}$	



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■DEVICE MARKING 打標

**GMC1623(2SC1623)=L4-L7**

**H<sub>FE</sub>:90-180=L4; 135-270=L5; 200-400=L6; 300-600=L7**

■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	Type 典型值	Max 最大值	Unit 單位
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■OFF CHARACTERISTICS 截止電特性

Emitter Cutoff Current 發射極截止電流(V <sub>EB</sub> =5.0v,I <sub>C</sub> =0)	I <sub>EBO</sub>	—	—	0.1	μA
Collector Cutoff Current 集電極截止電流(V <sub>CB</sub> =60v,I <sub>E</sub> =0)	I <sub>CBO</sub>	—	—	0.1	μA
Collector to Emitter Saturation Voltage 集電極飽和壓降(I <sub>C</sub> =100mAdc,I <sub>B</sub> =10mA)	V <sub>CE(sat)</sub>	—	0.15	0.3	Vdc
Base to Emitter Saturation Voltage 基極飽和壓降(I <sub>C</sub> =100mAdc,I <sub>B</sub> =10mA)	V <sub>BE(sat)</sub>	—	—	1.0	Vdc
Base to Emitter Voltage 基極-發射極電壓(V <sub>CE</sub> =6.0v,I <sub>C</sub> =1.0mA)	V <sub>BE</sub>	0.55	0.62	0.65	Vdc
DC Current Gain 直流電流增益 (V <sub>CE</sub> =6.0v,I <sub>C</sub> =1.0mA)	H <sub>FE</sub>	90	200	600	
Gain Bandwidth Product 增益帶寬乘積(V <sub>CE</sub> =6.0v,I <sub>C</sub> =1.0mA)	f <sub>T</sub>	—	250	—	MHz
Output Capacitance 輸出電容(V <sub>CB</sub> =6v,I <sub>E</sub> =0,f=1.0MHz)	C <sub>ob</sub>	—	3.0	—	pF

1. FR-5=1.0×0.75×0.062in.
2. Alumina=0.4×0.3×0.024in.99.5%alumina.