



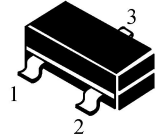
桂林斯壯桂微電子有限責任公司

Guilin Strong Micro-Electronics Co.,Ltd.

GMC2712(銷售型號 2SC2712)

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	V
Collector-Base Voltage 集電極-基極電壓	V_{CBO}	60	V
Emitter-Base Voltage 發射極-基極電壓	V_{EBO}	5.0	V
Collector Current-Continuous 集電極電流-連續	I_c	150	mA

■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°C Derate above 25°C 超過 25°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°C 超過 25°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

GMC2712(銷售型號 2SC2712)
H_{FE}:70-140=LO; 120-240=LY; 200-400=LG; 350-700=LL

■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	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 _{EB} =5.0v,I _C =0)	I _{EBO}	—	—	0.1	uA
Collector Cutoff Current 集電極截止電流(V _{CB} =60v,I _E =0)	I _{CBO}	—	—	0.1	uA
Collector Saturation Voltage 集電極飽和壓降(I _C =100mA,I _B =10mA)	V _{CE(sat)}	—	0.1	0.25	V
Base Saturation Voltage 基極飽和壓降(I _C =100mA,I _B =10mA)	V _{BE(sat)}	—	—	1.0	V
DC Current Gain 直流電流增益(V _{CE} =6.0v,I _C =2.0mA)	H _{FE}	70	—	700	
Gain Bandwidth Product 增益帶寬乘積(V _{CE} =6.0v,I _C =1.0mA)	f _T	80	—	—	MHz
Noise Figure 噪声係數 (V _{CE} =6V,I _C =0.1mA,f=1kHz,R _g =10kΩ)	NF	—	1.0	10	dB
Output Capacitance 輸出電容 (V _{CB} =6v,I _E =0,f=1.0MHz)	C _{ob}	—	2.0	3.5	pF

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