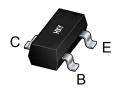


#### **FEATURES**

- Collector Current: I<sub>C</sub>=0.15A
- Power Dissipation of 150mw

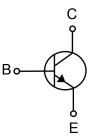


**SOT-23** 

# **Package Marking and Ordering Information**

Product ID	Pack	Qty(PCS)
2SC2712	SOT-23	3000

Marking						
70-140	120-240	200-400	350-700			
LO	LY	LG	LL			



# MAXIMUM RATINGS (Ta=25 unless otherwise noted)

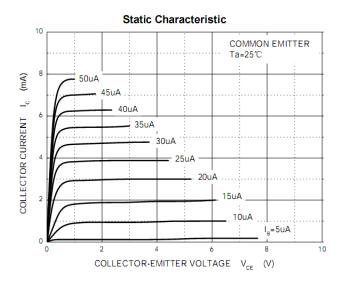
Parameter	Symbol	Limit	Unit
Collector-Base Voltage	V <sub>CBO</sub>	60	V
Collector-Emitter Voltage	V <sub>CEO</sub>	50	V
Emitter-Base Voltage	V <sub>EBO</sub>	5	V
Collector Current	I <sub>c</sub>	150	mA
Collector Power Dissipation	P <sub>c</sub>	150	mW
Junction Temperature	T <sub>j</sub>	150	℃
Storage Temperature	$T_{stg}$	-55∼+150	℃

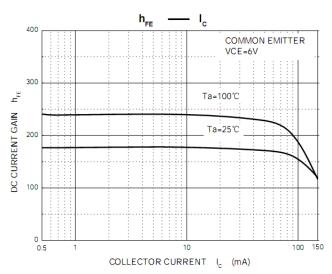


## ELECTRICAL CHARACTERISTICS (Ta=25 unless otherwise specified)

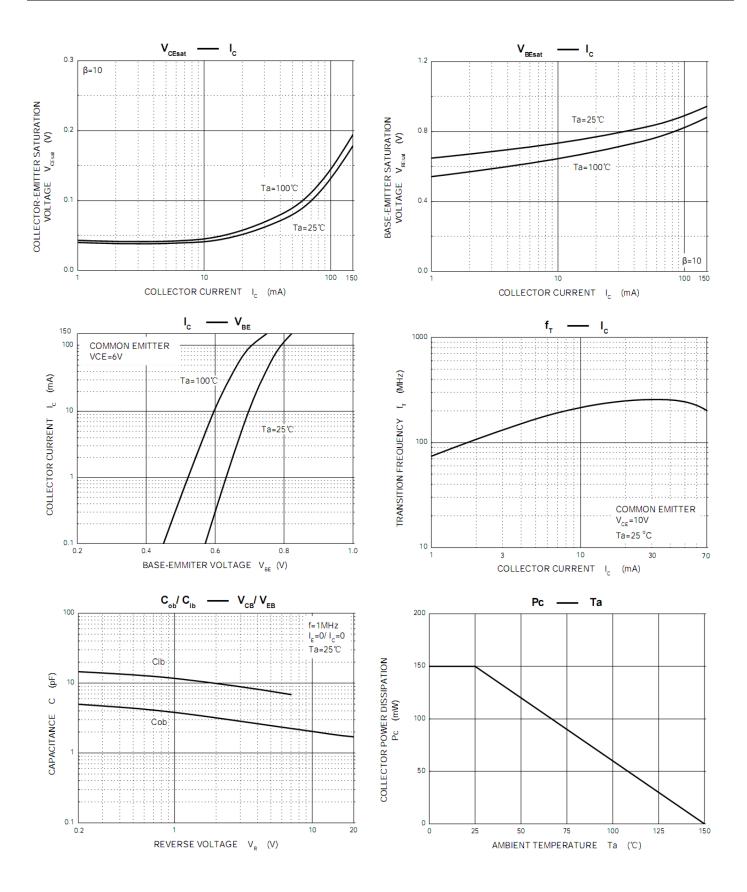
Parameter	Symbol	Test conditions	Min	Тур	Max	Unit
Collector-base breakdown voltage	V <sub>(BR)CBO</sub>	I <sub>C</sub> = 100μA, I <sub>E</sub> =0	60			V
Collector-emitter breakdown voltage	V <sub>(BR)CEO</sub>	I <sub>C</sub> =1mA ,I <sub>B</sub> =0	50			V
Emitter-base breakdown voltage	V <sub>(BR)EBO</sub>	I <sub>E</sub> = 100μΑ, I <sub>C</sub> =0	5			٧
Collector cut-off current	I <sub>CBO</sub>	V <sub>CB</sub> = 60 V, I <sub>E</sub> =0			0.1	μΑ
Emitter cut-off current	I <sub>EBO</sub>	V <sub>EB</sub> =5V, I <sub>C</sub> =0			0.1	μΑ
DC current gain	h <sub>FE</sub>	V <sub>CE</sub> =6V, I <sub>C</sub> =2mA	70		700	
Collector-emitter saturation voltage	V <sub>CE(sat)</sub>	I <sub>C</sub> = 100mA, I <sub>B</sub> =10mA		0.1	0.25	V
Transition frequency	f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> = 1mA	80			MHz
Output capacitance	C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0,f=1 MHz		2.0	3.5	pF
Noise Figure	NF	$V_{CE}$ =6 $V$ , $I_{C}$ =0.1 $m$ A, $f$ =1 $k$ Hz, Rg=10 $k$ $\Omega$		1.0	10	dB

## **Typical Characteristics**



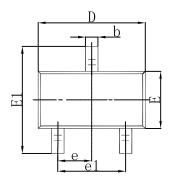


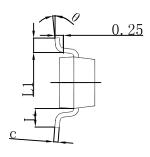


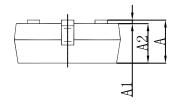




# **SOT-23 Package Outline Dimensions**

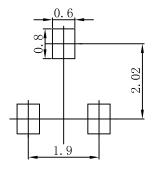






Symbol	Dimensions In Millimeters		Dimensions In Inches		
Symbol	Min	Max	Min	Max	
Α	0.900	1.150	0.035	0.045	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.050	0.035	0.041	
b	0.300	0.500	0.012	0.020	
С	0.080	0.150	0.003	0.006	
D	2.800	3.000	0.110	0.118	
Е	1.200	1.400	0.047	0.055	
E1	2.250	2.550	0.089	0.100	
е	0.950 TYP		0.037 TYP		
e1	1.800	2.000	0.071	0.079	
L	0.550 REF		0.022 REF		
L1	0.300	0.500	0.012	0.020	
θ	0°	8°	0°	8°	

# **SOT-23 Suggested Pad Layout**



- Note: 1.Controlling dimension: in millimeters.
- 2.General tolerance:± 0.05mm.
  3.The pad layout is for reference purposes only.



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