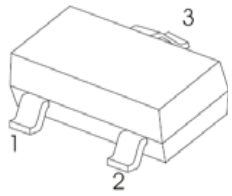
2SC1623

SOT-23 Plastic-Encapsulate Transistors

Features

- hFE=200(Typ), VCE=6V,IC=1mA
- Power Dissipation of 200mW
- High Stability and High Reliability
- Transistor(NPN)

SOT－23



1. BASE
2. EMITTER
3. COLLECTOR

Mechanical Data

- package:SOT-23
- Flammability rating of epoxy resin: UL 94V-0
- Mounting Position: Any

Ordering Information

Part Number	Package	Packing	Quantity per reel	Reel Size
2SC1623	SOT-23	Tape & Reel	3,000 PCS	7 inches

Maximum Ratings & Thermal Characteristics(Ratings at 25℃ ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter -Base Voltage	V_{EBO}	5	V
Collector Current-Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	℃
Storage Temperature	Tstg	-55-+150	℃
Thermal resistance From junction to ambient	$R_{\theta JA}$	625	℃/W

■ Electrical Characteristics(Ratings at 25℃ ambient temperature unless otherwise specified)

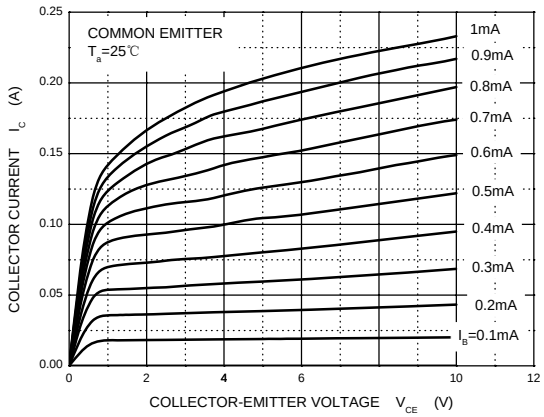
Parameter	Symbols	Test Condition	Limits			Unit
			Min	Typ	Max	
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100uA, I_E=0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=1mA, I_B=0	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100uA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=60V, I_E=0			100	nA
Emitter cut-off current	I_{EBO}	V_{EB}=5V, I_C=0			100	nA
DC current gain	h_{FE}	V_{CE}=6V, I_C=1mA	90	200	600	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=100mA, I_B=10mA			0.30	V
Base -emitter saturation voltage	$V_{BE(sat)}$	I_C=100mA, I_B=10mA			1.00	V
Transition frequency	f_T	V_{CE}=6V, I_C=10mA,f=30MHz		250		MHz

■ Classification Of hFE(2)

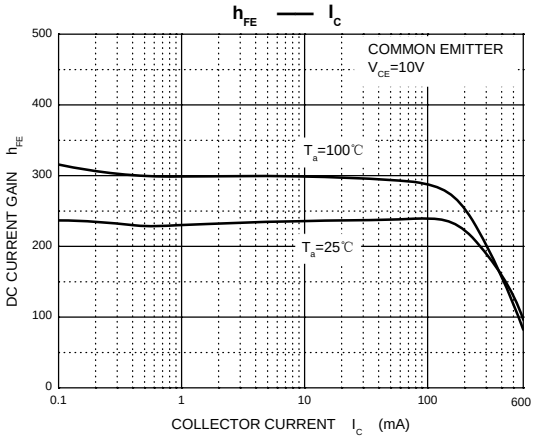
RANK	L4	L5	L6	L7
RANGE	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

■ Typical Characteristics

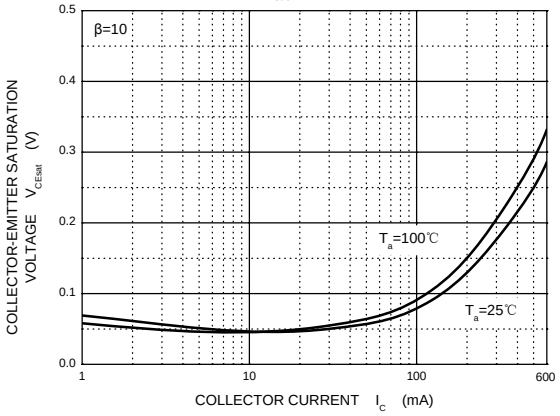
Static Characteristic



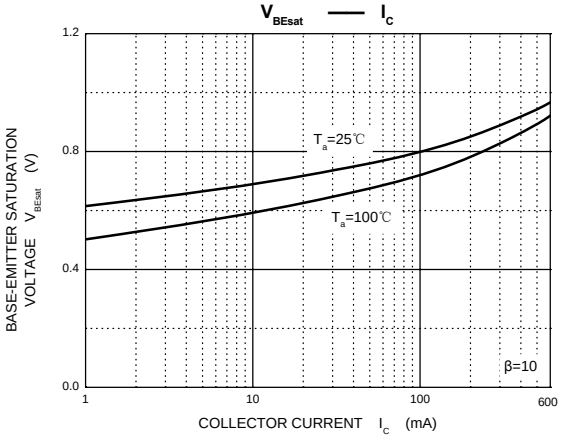
hFE — IC



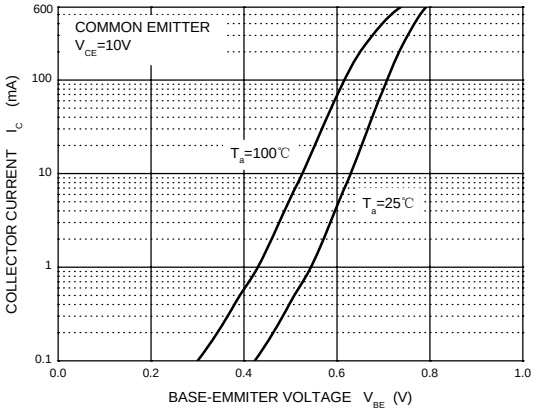
VCEsat — IC



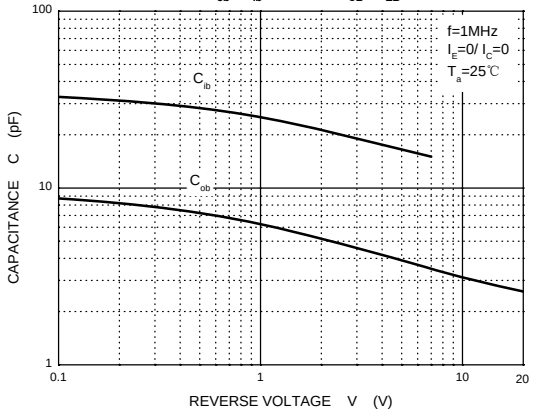
VBEsat — IC



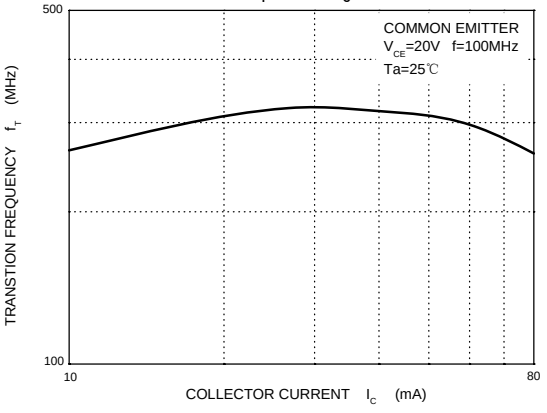
IC — VBE



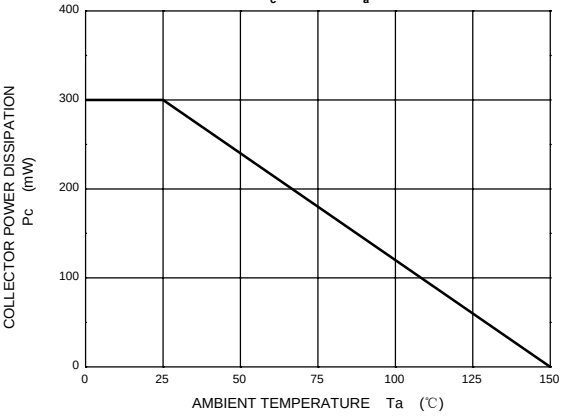
Cob / Cib — VCB / VEB



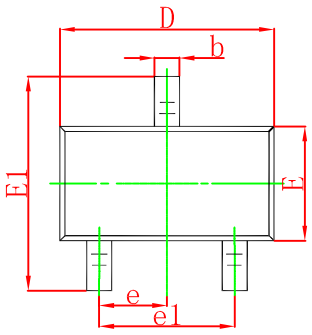
fT — IC

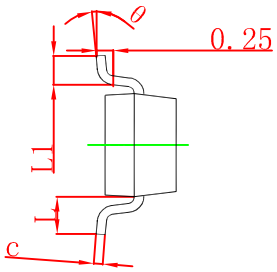


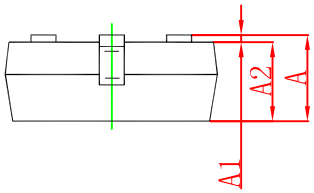
Pc — Ta



■ SOT-23 Package Outline Dimensions







Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	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
c	0.080	0.150	0.003	0.006
D	2.800	3.000	0.110	0.118
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	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°