

L2SC1623SWT1G

General Purpose Transistors NPN Silicon

1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L2SC1623SWT1G	L7	3000/Tape&Reel
L2SC1623SWT3G	L7	10000/Tape&Reel

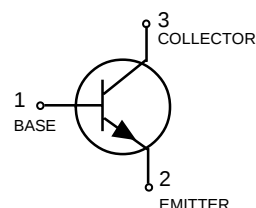
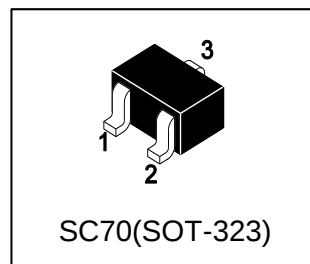
3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	50	V
Collector–Base Voltage	VCBO	60	V
Emitter–Base Voltage	VEBO	7	V
Collector Current — Continuous	IC	150	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	150 1.2	mW mW/°C
Thermal Resistance, Junction–to–Ambient(Note 1)	RθJA	833	°C/W
Junction and Storage temperature	TJ,Tstg	–55~+150	°C

1. FR-5 = 1.0×0.75×0.062 in.



5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

OFF CHARACTERISTICS

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector–Emitter Breakdown Voltage (IC = 1.0 mA, IB = 0)	VBR(CEO)	50	-	-	V
Collector–Base Breakdown Voltage (IC = 50 μ A, IE = 0)	VBR(CBO)	60	-	-	V
Emitter–Base Breakdown Voltage (IE = 50 μ A, IC = 0)	VBR(EBO)	7	-	-	V
Collector Cutoff Current (VCB = 60 V, IE = 0)	ICBO	-	-	100	nA
Emitter Cutoff Current (VEB = 5V, IC = 0)	IEBO	-	-	100	nA

ON CHARACTERISTICS (Note 2.)

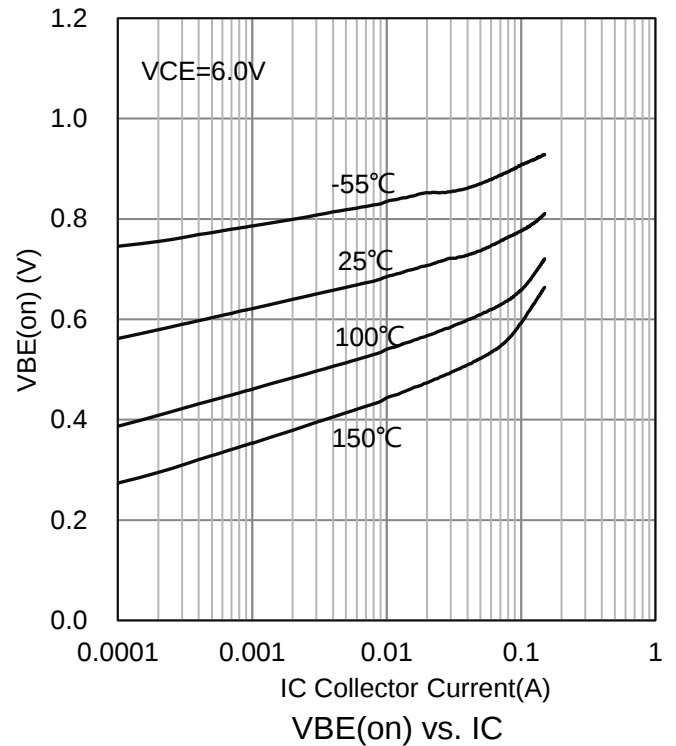
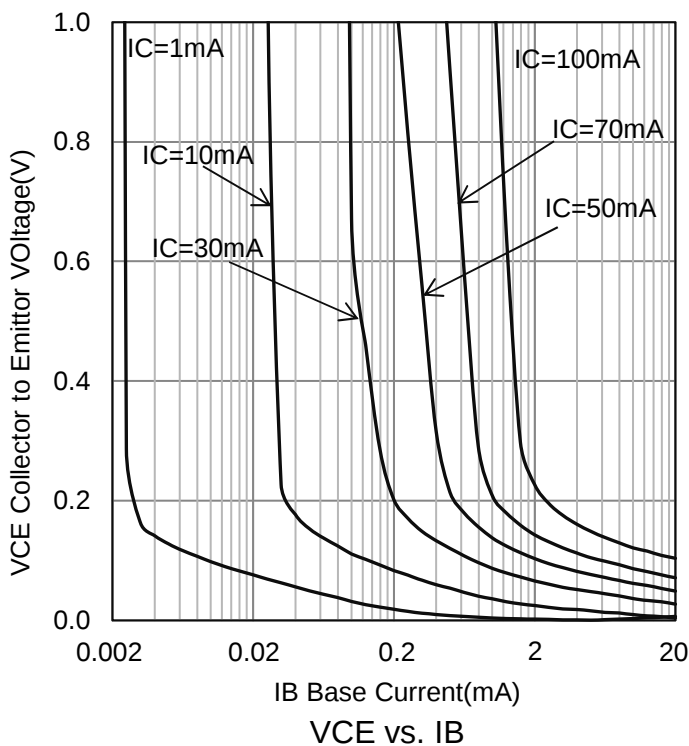
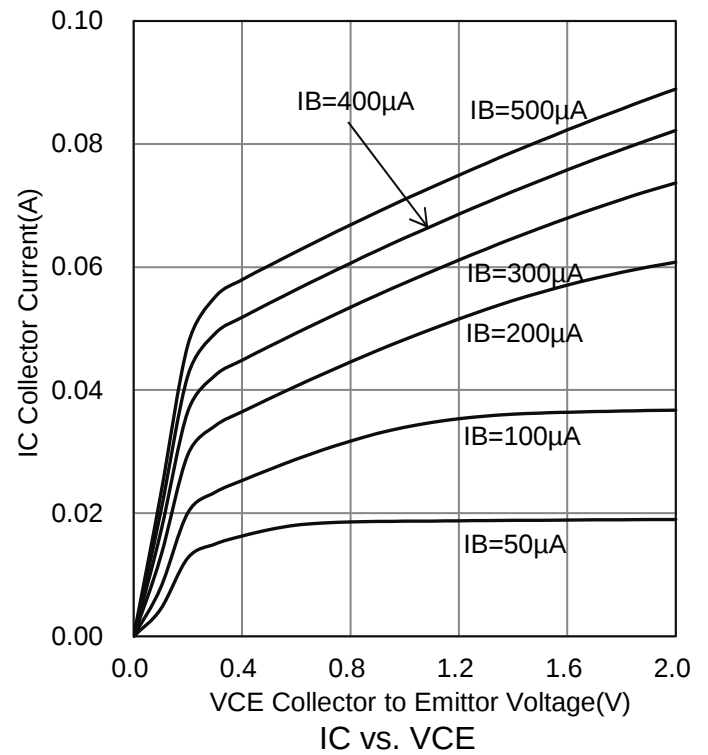
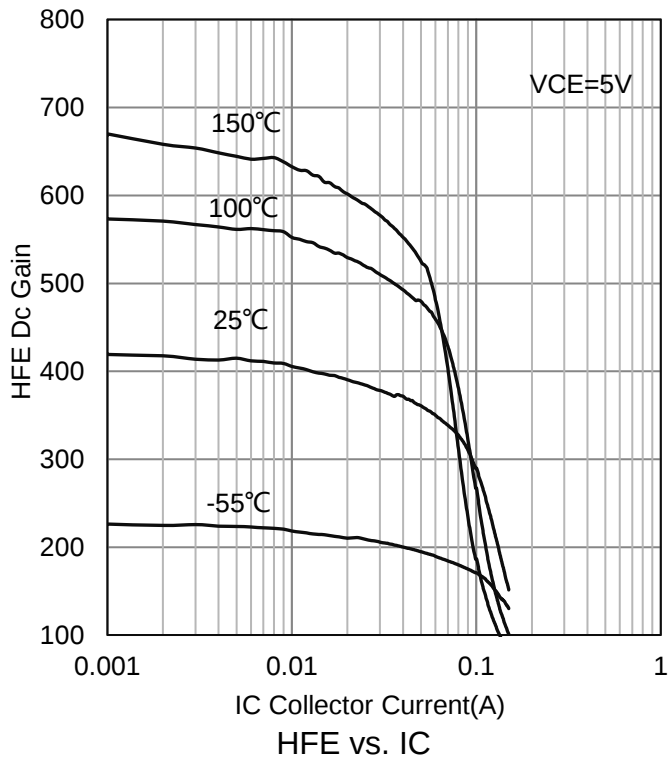
DC Current Gain (IC =1.0mA, VCE =6V)	HFE	270	-	560	
Collector–Emitter Saturation Voltage (IC=100mA, IB =10mA)	VCE(sat)	-	0.15	0.3	V
Base–Emitter Saturation Voltage (IC =100mA, IB =10mA)	VBE(sat)	-	0.86	1.0	V
Base -Emitter On Voltage (IC =1mA, VCE =6.0V)	VBE(on)	0.55	0.62	0.65	V

SMALL–SIGNAL CHARACTERISTICS

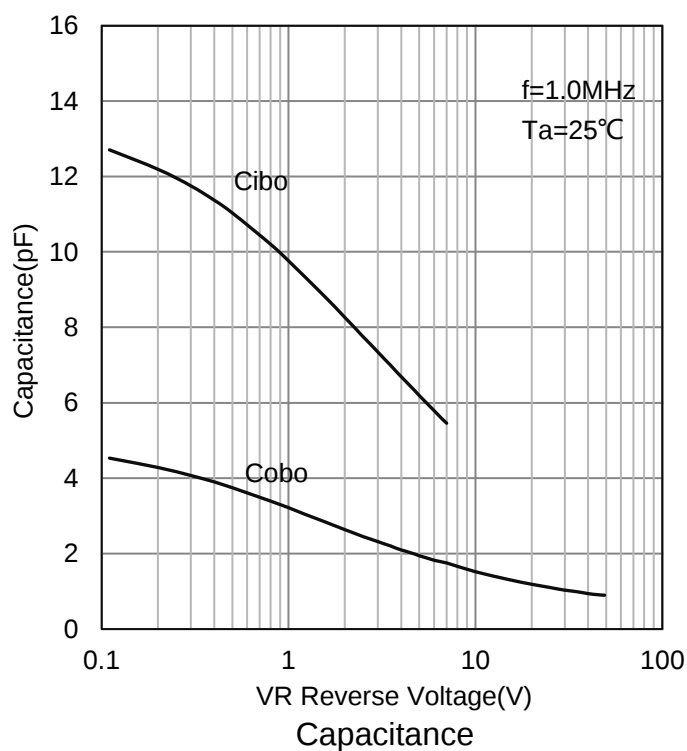
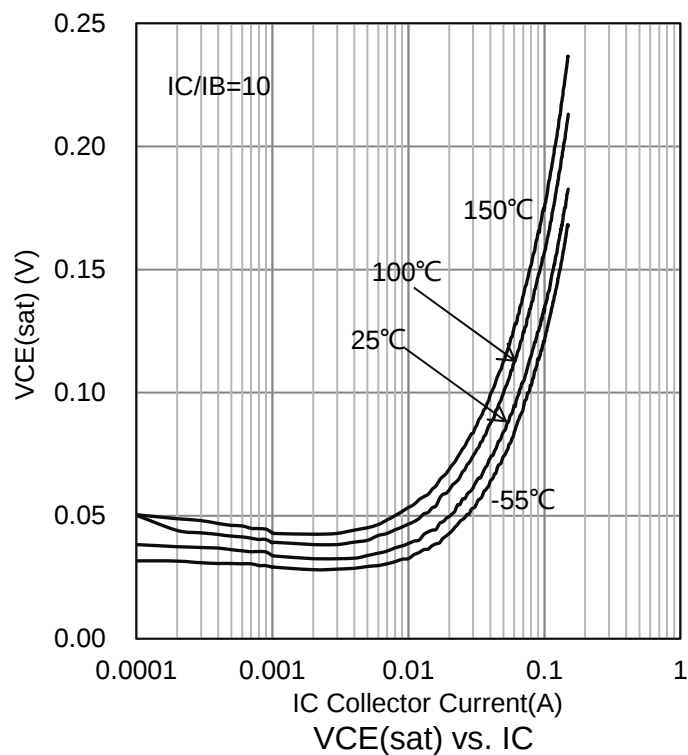
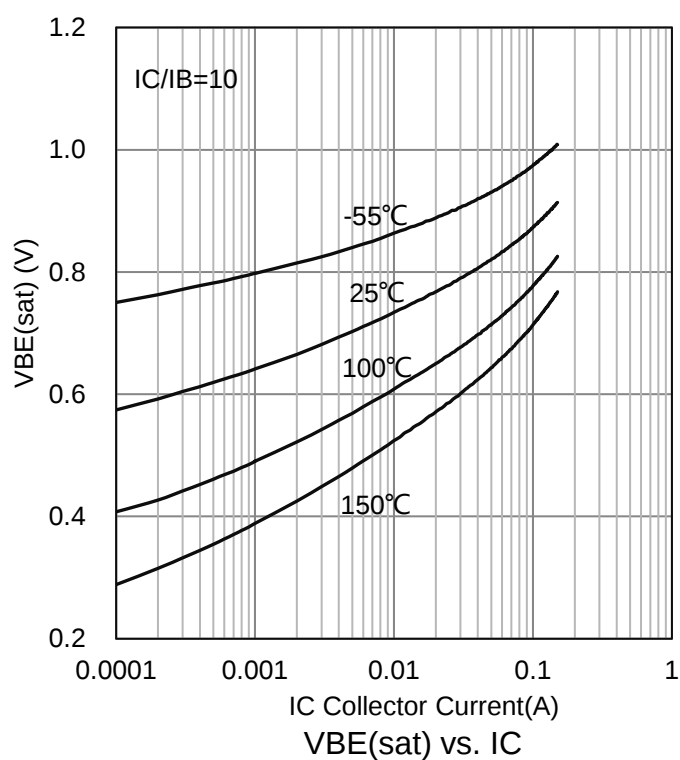
Current–Gain — Bandwidth Product (VCE =6.0V, IE =-10mA)	fT	-	250	-	MHz
Output Capacitance (VCE = 6V, IE =0, f=1.0MHz)	Cobo	-	3	-	pF

2.Pulse Test: Pulse Width $\leq 300 \mu$ s, Duty Cycle $\leq 2.0\%$.

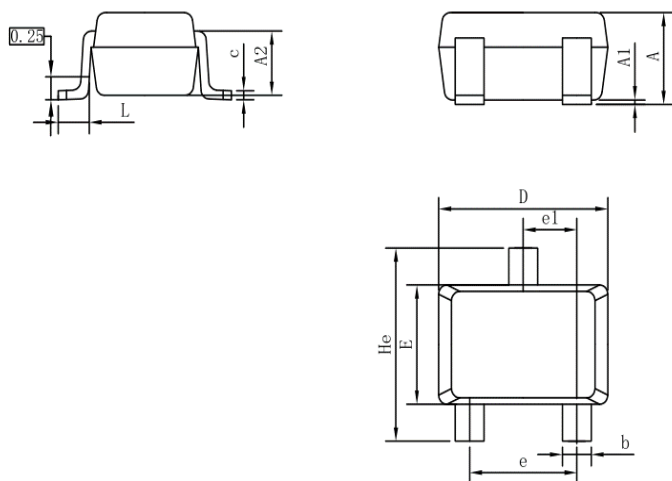
6.ELECTRICAL CHARACTERISTICS CURVES



6.ELECTRICAL CHARACTERISTICS CURVES(Con.)

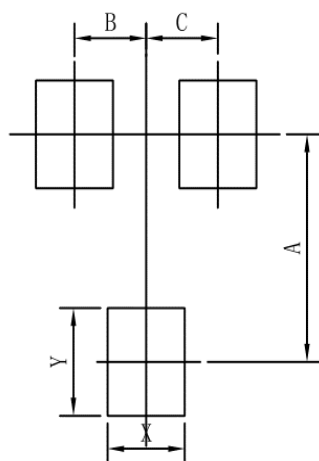


7.OUTLINE AND DIMENSIONS



SC70			
DIM	MIN	NOR	MAX
A	0.80	0.95	1.00
A1	0.00	0.05	0.10
A2	0.7 REF		
b	0.30	0.35	0.40
c	0.10	0.15	0.25
D	1.80	2.05	2.20
E	1.15	1.30	1.35
e	1.20	1.30	1.40
e1	0.65 BSC		
L	0.20	0.35	0.56
He	2.00	2.10	2.40
ALL Dimension in mm			

8.SOLDERING FOOTPRINT



SC70	
DIM	MIN
A	1.90
B	0.65
C	0.65
X	0.70
Y	0.90

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