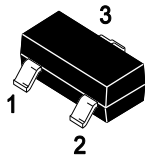
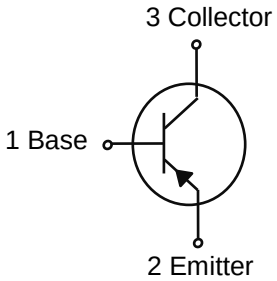
L2SA812SLT1G
S-L2SA812SLT1G

General Purpose Transistors PNP Silicon



SOT23(TO-236)



1. FEATURES

- High Voltage: VCEO = -50 V.
- Epitaxial planar type.
- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.

2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
L2SA812SLT1G	M7	3000/Tape&Reel
L2SA812SLT3G	M7	10000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	-50	V
Collector–Base Voltage	VCBO	-60	V
Emitter–Base Voltage	VEBO	-6	V
Collector Current — Continuous	IC	-150	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−5 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	 200 1.8	 mW mW/ºC
Thermal Resistance, Junction–to–Ambient(Note 1)	RΘJA	556	ºC/W
Junction and Storage temperature	TJ,Tstg	−55~+150	ºC

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 μA, IE = 0)	VBR(CBO)	-60	-	-	V
Emitter–Base Breakdown Voltage (IE = -50 μA, IC = 0)	VBR(EBO)	-6	-	-	V
Collector-Base cut-off current (IE = 0, VCB = -50 V)	ICBO	-	-	-0.1	μA
Emitter-Base cut-off current (IC = 0, VEB = -6 V)	IEBO	-	-	-0.1	μA
Collector-Emitter cutoff Current (IB=0, VCE = -50V)	ICEO	-	-	-10	μA

ON CHARACTERISTICS

DC Current Gain (IC = - 1mA,VCE = - 6.0V)	HFE	270	-	560	
Collector–Emitter Saturation Voltage (IC = - 100mA,IB = - 10mA)	VCE(sat)	-	-0.18	-0.3	V
Base -Emitter On Voltage (IC = -1.0mA,VCE = - 6.0V)	VBE(on)	-0.58	-0.62	-0.68	V

SMALL–SIGNAL CHARACTERISTICS

Current–Gain — Bandwidth Product (VCE = - 6.0V,IE = - 10mA)	fT	-	180	-	MHz
Output Capacitance (VCE = - 10V, IE =0, f=1.0MHz)	Cobo	-	4.5	-	pF

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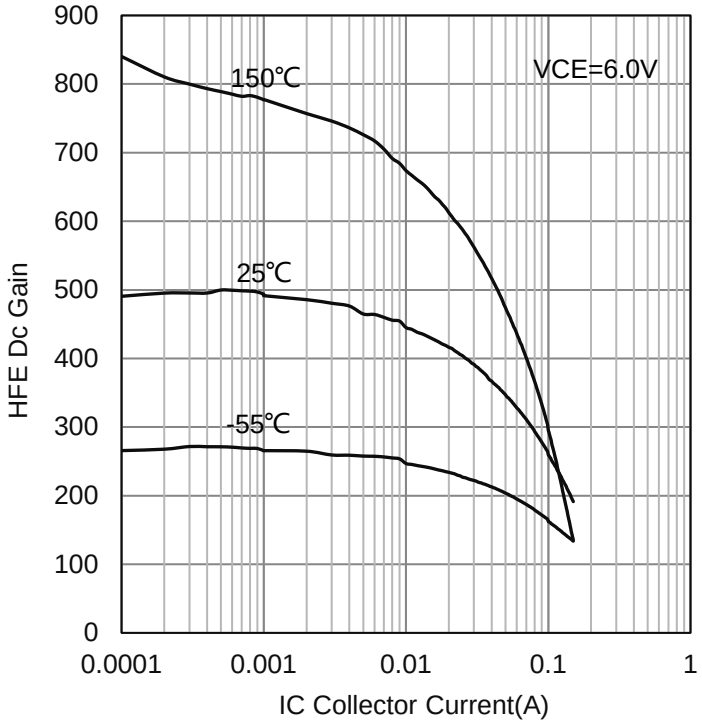
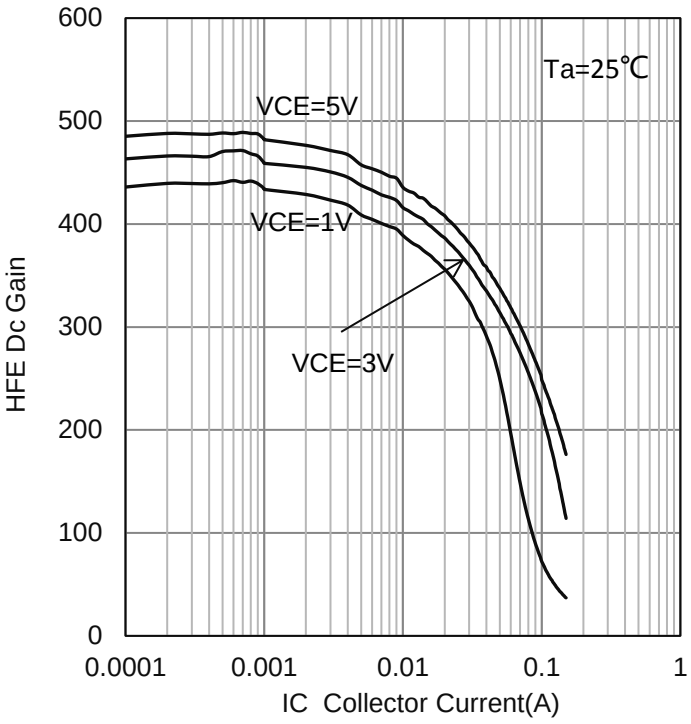
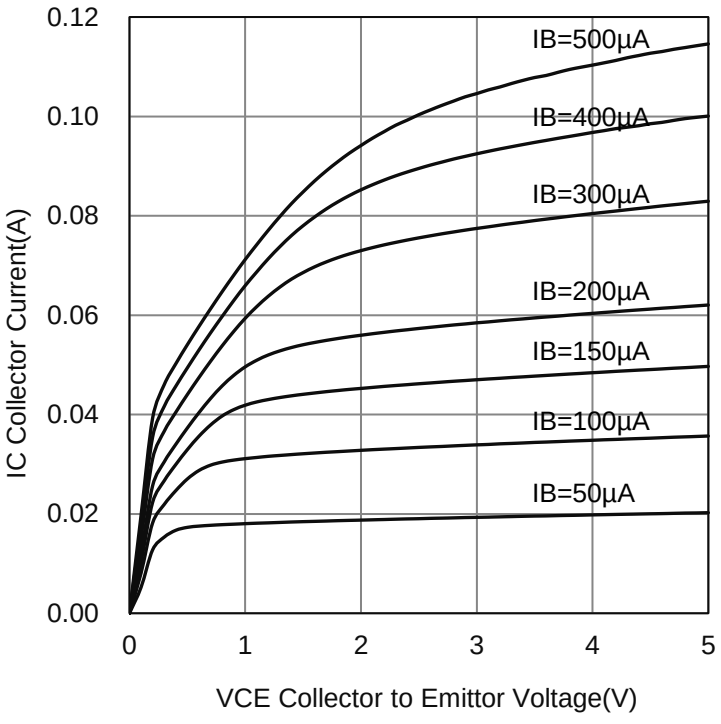
6.ELECTRICAL CHARACTERISTICS CURVES



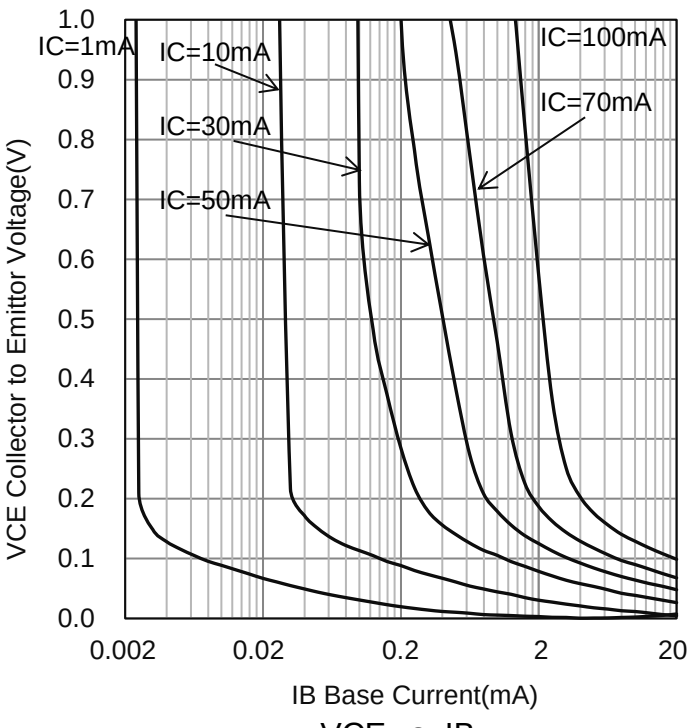
HFE vs. IC



HFE vs. IC

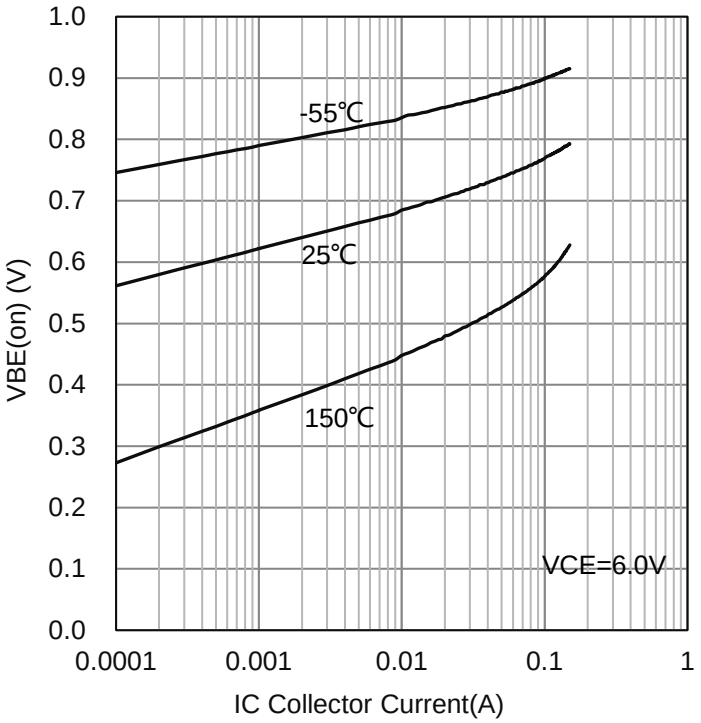


IC vs. VCE

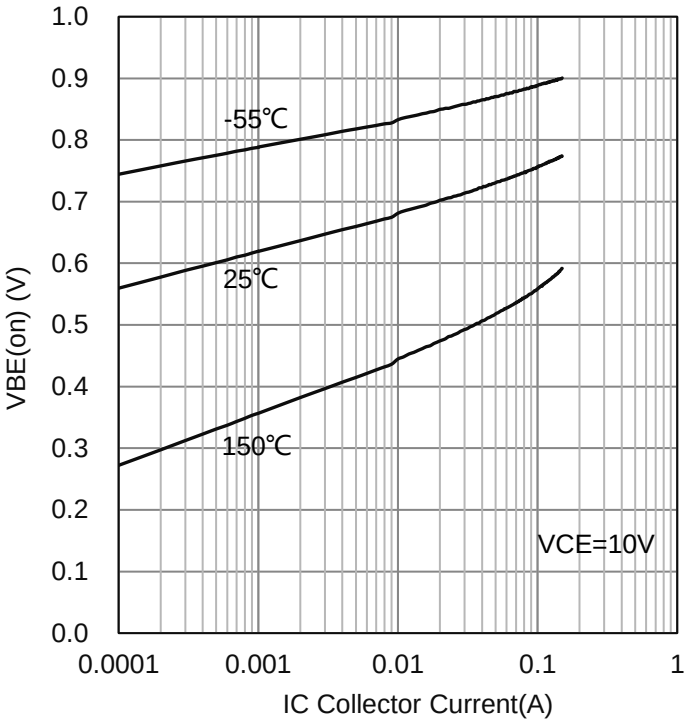


VCE vs. IB

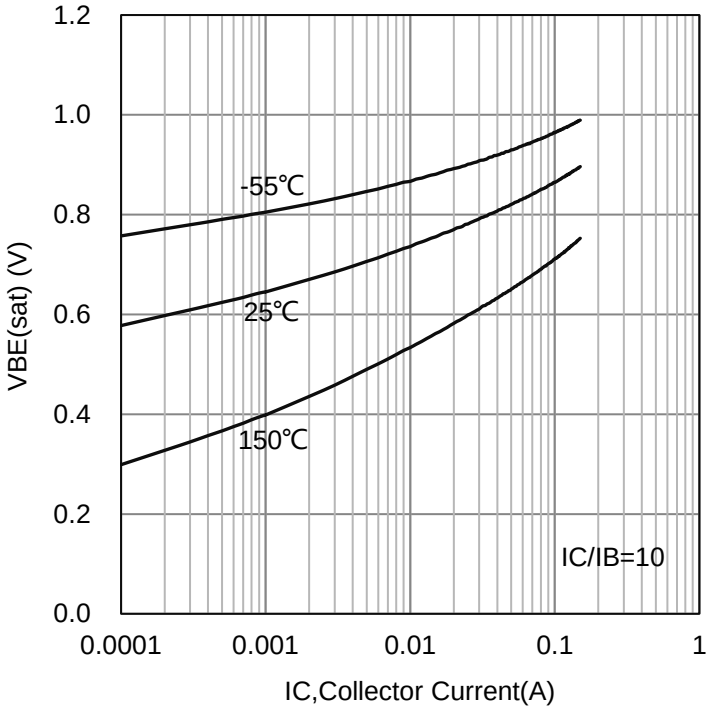
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



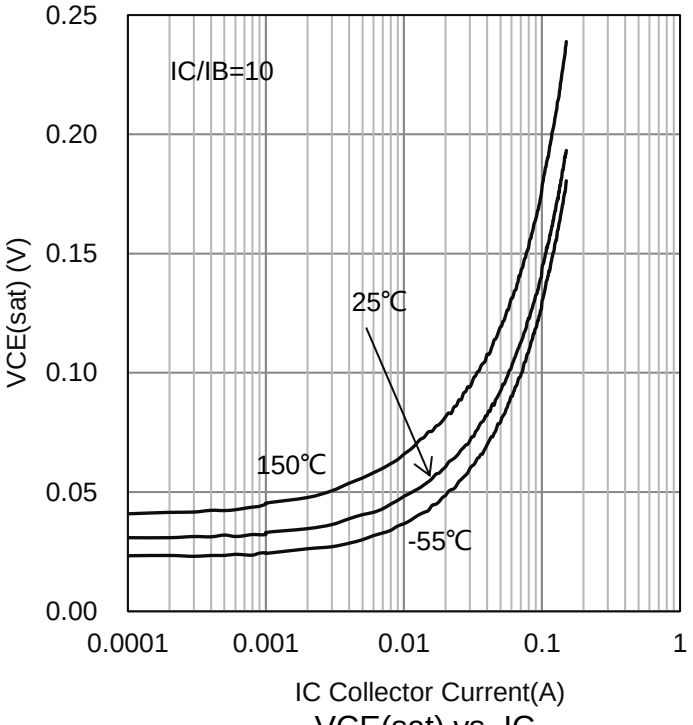
VBE(on) vs. IC



VBE(on) vs. IC

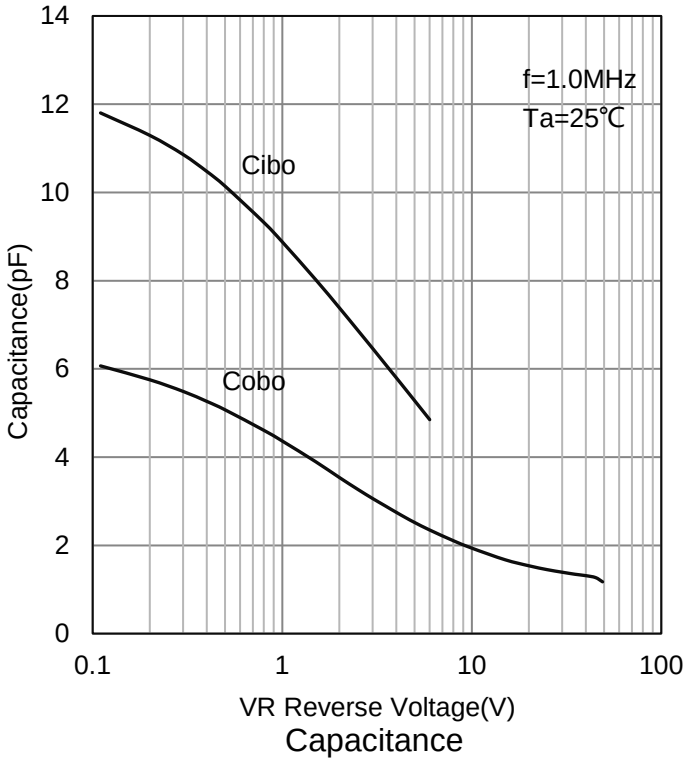


VBE(sat) vs. IC

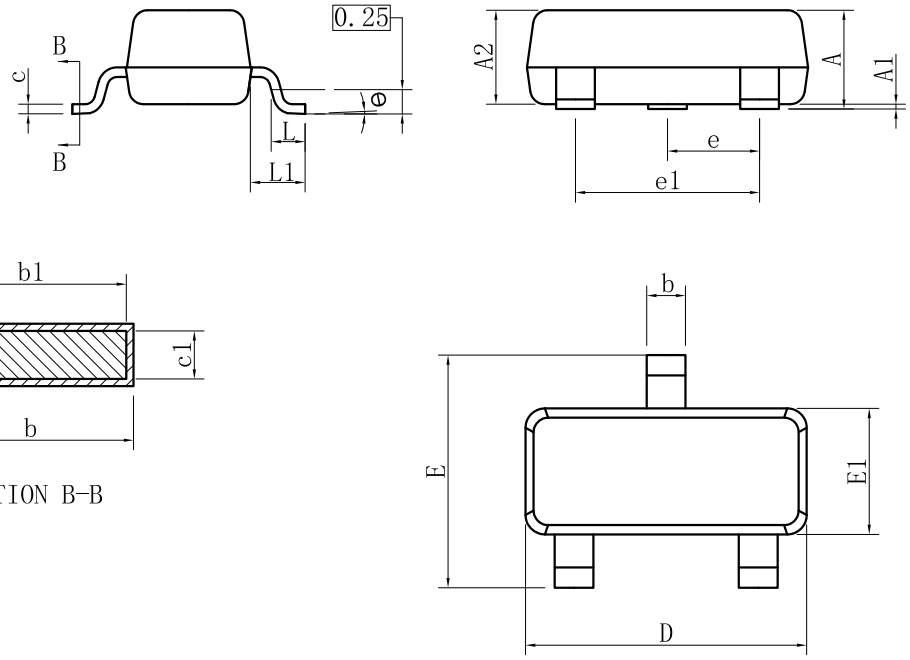


VCE(sat) vs. IC

6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



7.OUTLINE AND DIMENSIONS

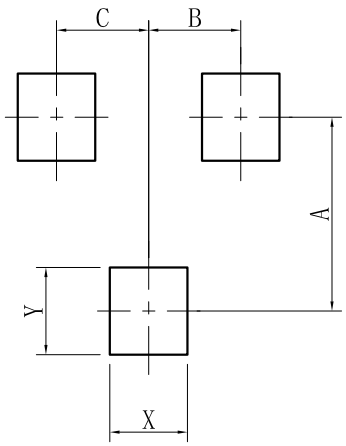


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

GENERAL NOTES

1. Top package surface finish Ra0.4±0.2um
2. Bottom package surface finish Ra0.7±0.2um
3. Side package surface finish Ra0.4±0.2um

8.SOLDERING FOOTPRINT



SOT-23	
DIM	(mm)
X	0.80
Y	0.90
A	2.00
B	0.95
C	0.95

DISCLAIMER

- Curve guarantee in the specification. The curve of test items with electric parameter is used as quality guarantee. The curve of test items without electric parameter is used as reference only.

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