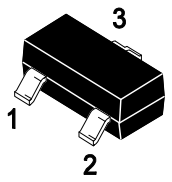
L2SA1037AKRLT1G

General Purpose Transistors PNP Silicon



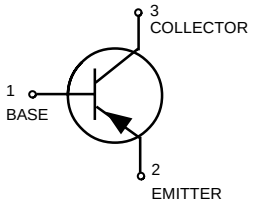
SOT23

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
L2SA1037AKRLT1G	FR	3000/Tape&Reel
L2SA1037AKRLT3G	FR	13000/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
Junction temperature	Tj	150	℃
Storage temperature	Tstg	-55~+150	℃

4. THERMAL CHARACTERISTICS

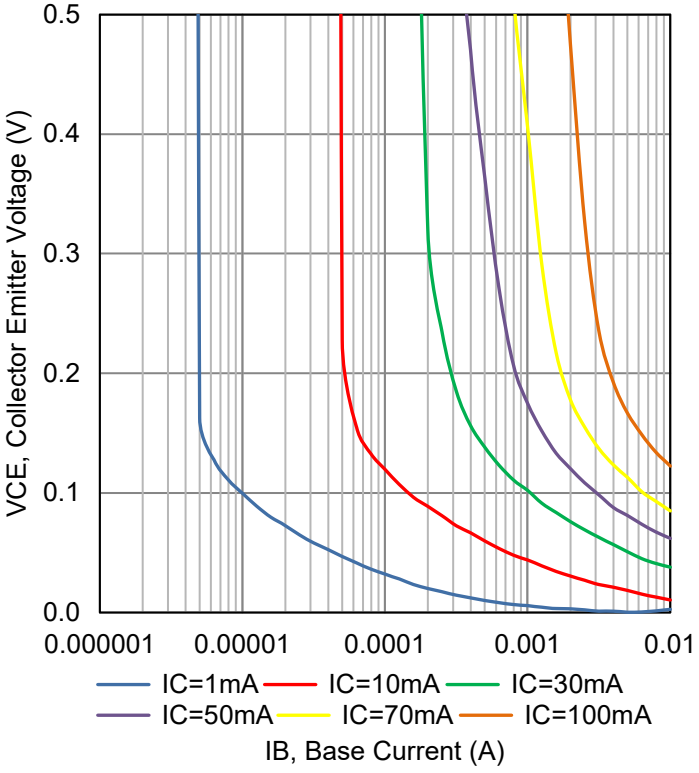
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	323 2.6	mW mW/℃
Thermal Resistance, Junction–to–Ambient	RΘJA	386	℃/W

1. Device mounted on an FR-4 PCB, single-sided copper, tin-plated and standard footprint.

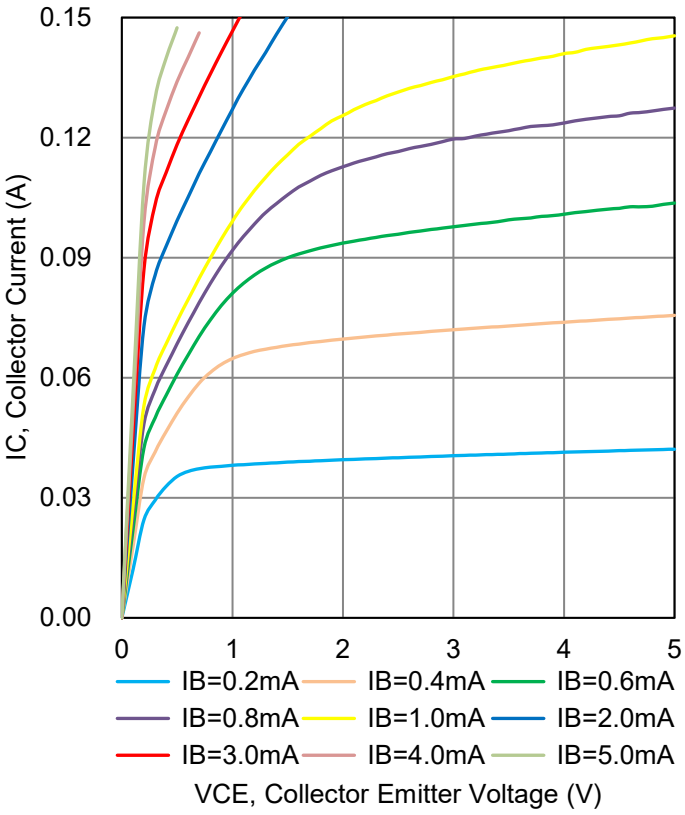
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector-Emitter Breakdown Voltage (IC =-1.0mA,IB=0)	V(BR)CEO	-50	-	-	V
Emitter-Base Breakdown Voltage (IE = -50μA,IC=0)	V(BR)EBO	-6	-	-	V
Collector-Base Breakdown voltage (IC = -50μA,IE=0)	V(BR)CBO	-60	-	-	V
Collector-Base Cutoff Current (VCB = -60 V,IE=0)	ICBO	-	-	-0.1	μA
Emitter-Base Cutoff Current (VEB = -6V,IC=0)	IEBO	-	-	-0.1	μA
Collector-Emitter cutoff Current (VCE= -50V,IB=0)	ICEO	-	-	-10	μA
Collector-Emitter Saturation Voltage (IC =-50mA,IB =-5mA)	VCE(Sat)	-	-	-0.5	V
Base–Emitter Saturation Voltage (IC = -100mA, IB = -10mA)	VBE(Sat)	-	-	-1.1	V
DC current transfer ratio (VCE = – 6 V, IC = –1mA)	HFE	180	-	390	
Transition frequency (VCE = – 12 V, IE = 2mA, f=30MHz)	fT	-	140	-	MHz
Output capacitance (VCB = – 12 V, IE = 0A, f =1MHz)	Cobo	-	2.4	5	pF

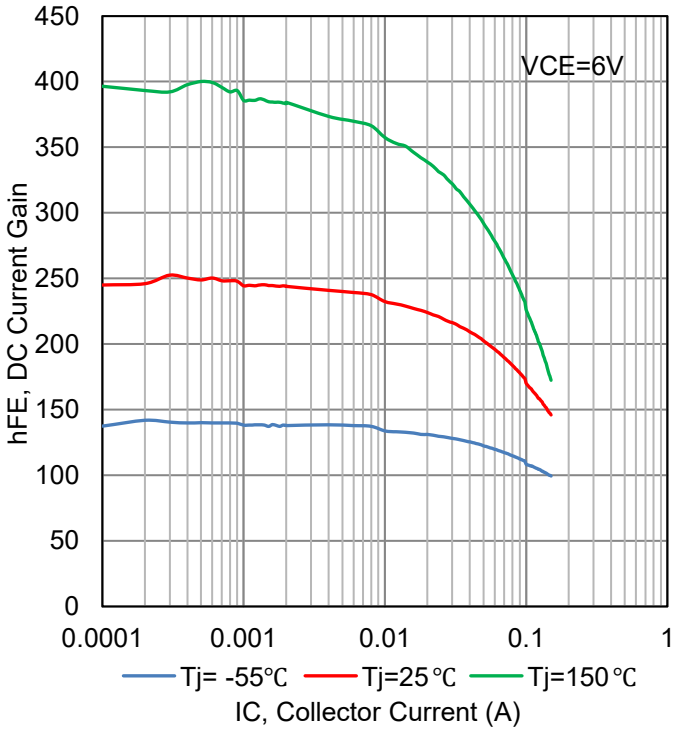
6.ELECTRICAL CHARACTERISTICS CURVES



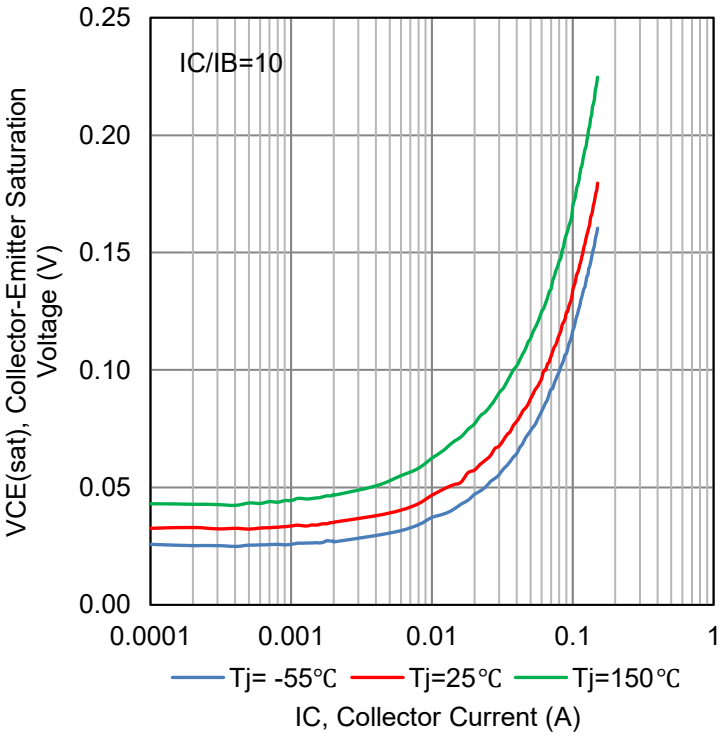
VCE vs. IB



IC vs. VCE

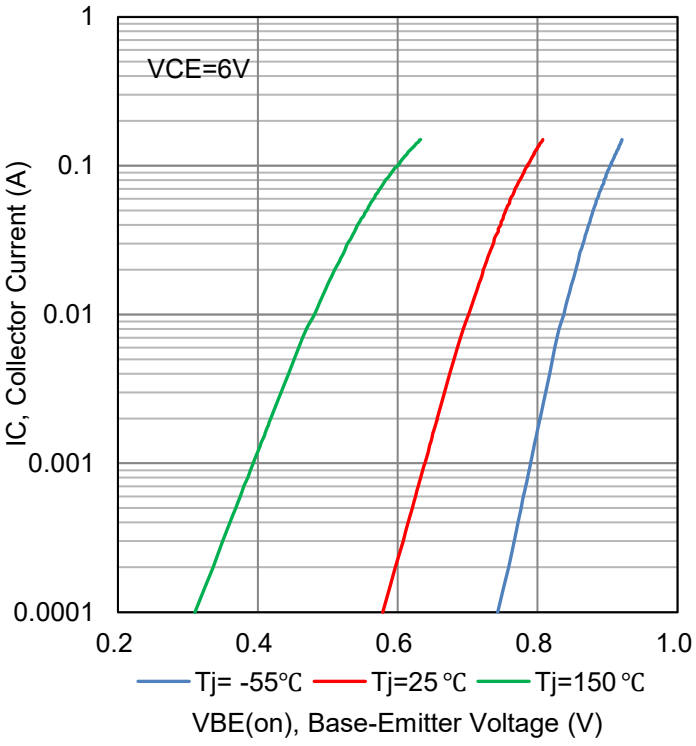


HFE vs. IC

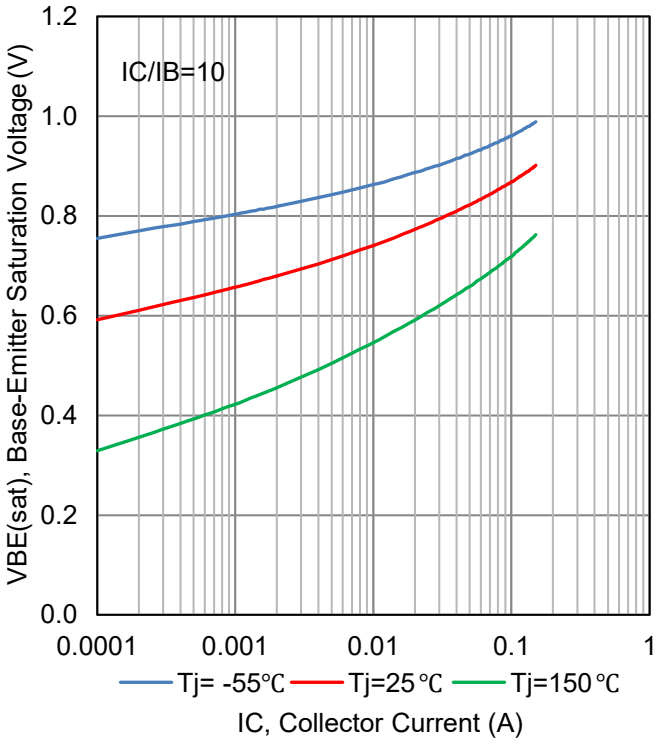


VCE(sat) vs. IC

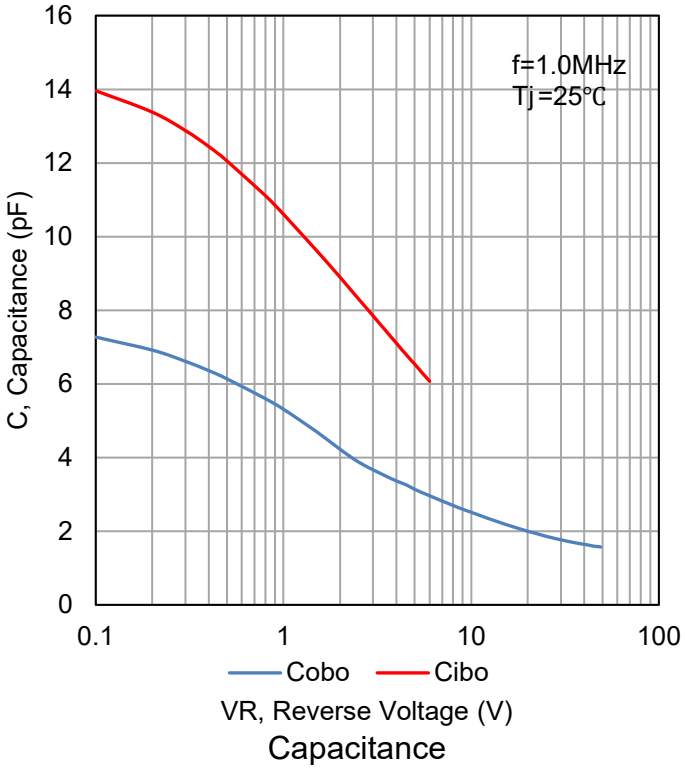
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



VBE(on) vs. IC

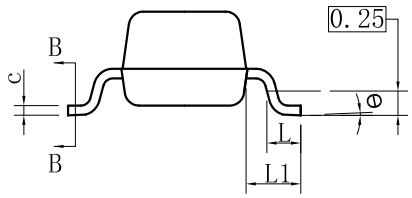


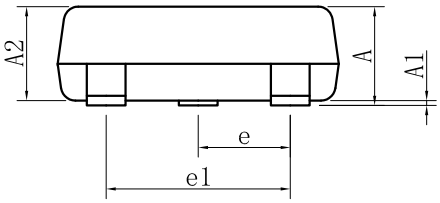
VBE(sat) vs. IC

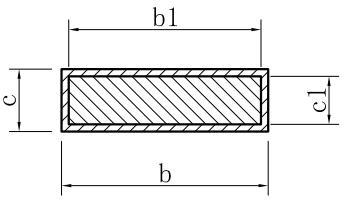


Capacitance

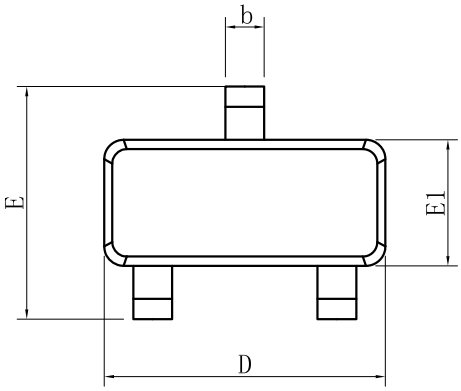
7.OUTLINE AND DIMENSIONS







SECTION B-B

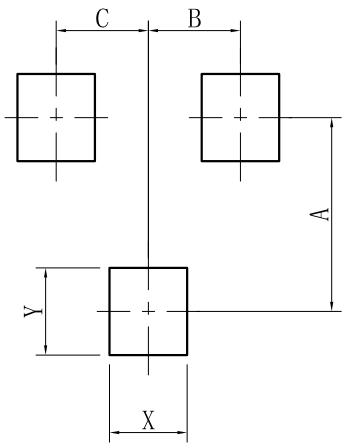


SOT23			
DIM	MIN	NOR	MAX
A	0.89	-	1.12
A1	0.01	-	0.10
A2	0.88	0.95	1.02
b	0.30	-	0.50
b1	0.30	0.40	0.45
c	0.08	-	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	-	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	-	8°
All Dimensions in mm			

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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