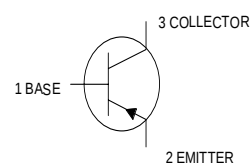
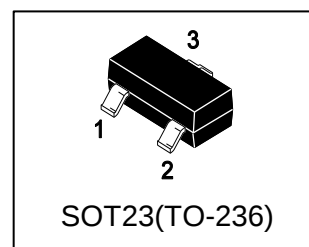


S-LMBTA56LT1G

Driver Transistors PNP Silicon

1. FEATURES

- 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
S-LMBTA56LT1G	2GM	3000/Tape&Reel
S-LMBTA56LT3G	2GM	13000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	-80	V
Collector–Base Voltage	VCBO	-80	V
Emitter–Base Voltage	VEBO	-4	V
Collector Current — Continuous	IC	-500	mA
Junction temperature	TJ	-55~+150	°C
Storage temperature	Tstg	-55~+150	°C

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	305 2.4	mW mW/°C
Thermal Resistance, Junction–to–Ambient(Note 1)	RθJA	409	°C/W

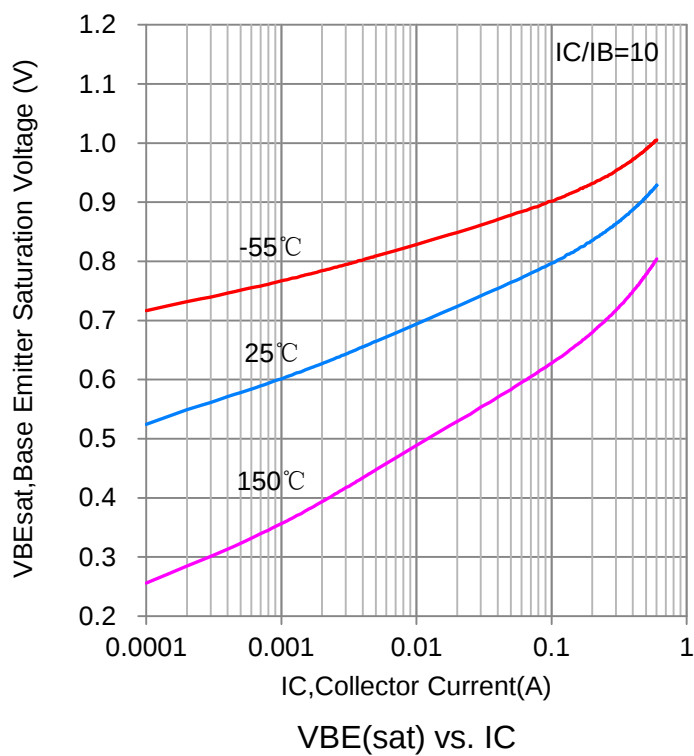
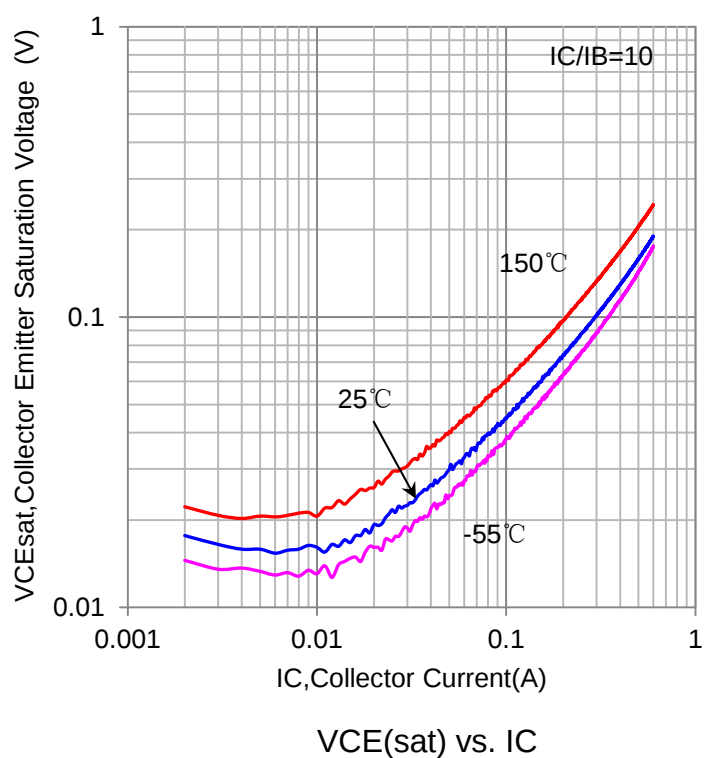
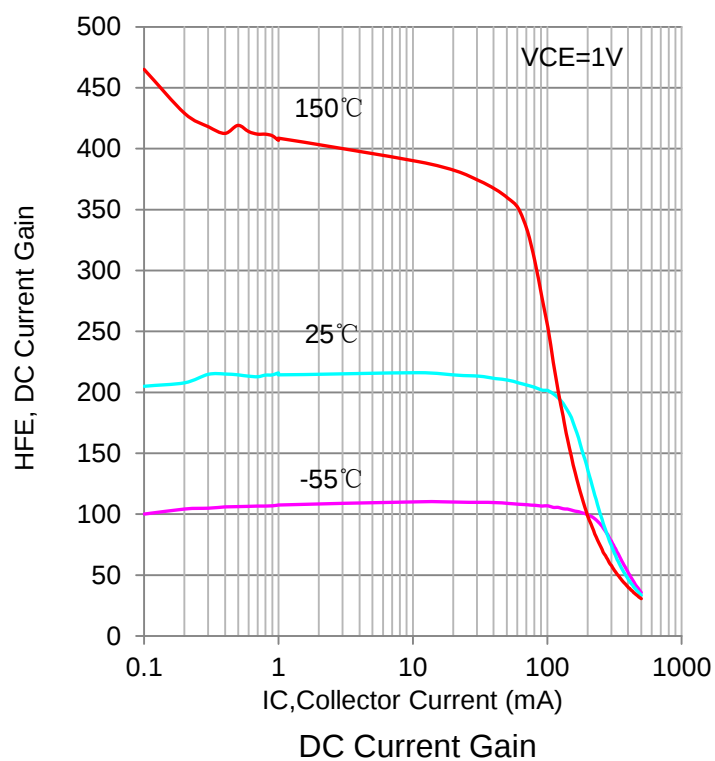
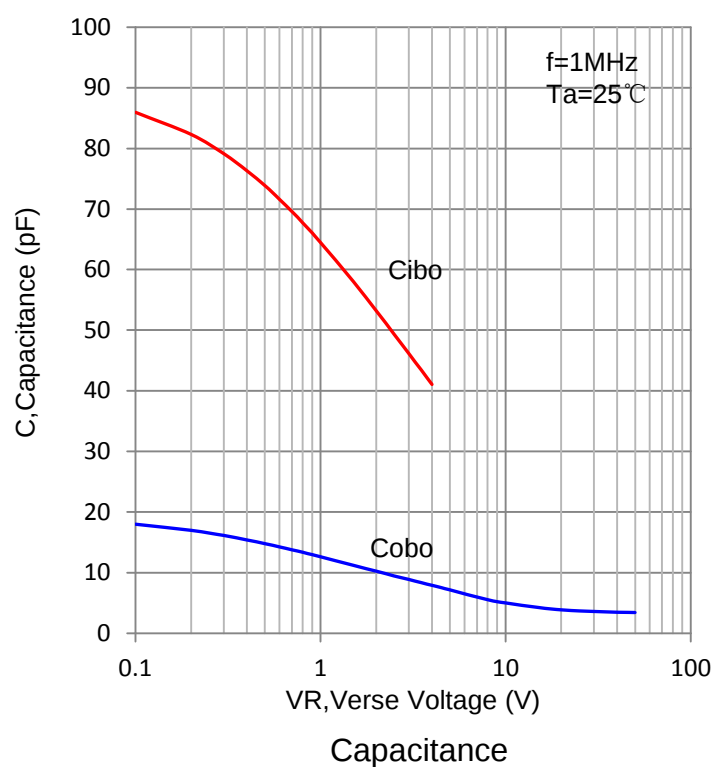
1. 30.0mm×25.0mm×1.6mm(FR4), Copper foil thickness 35μm;

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

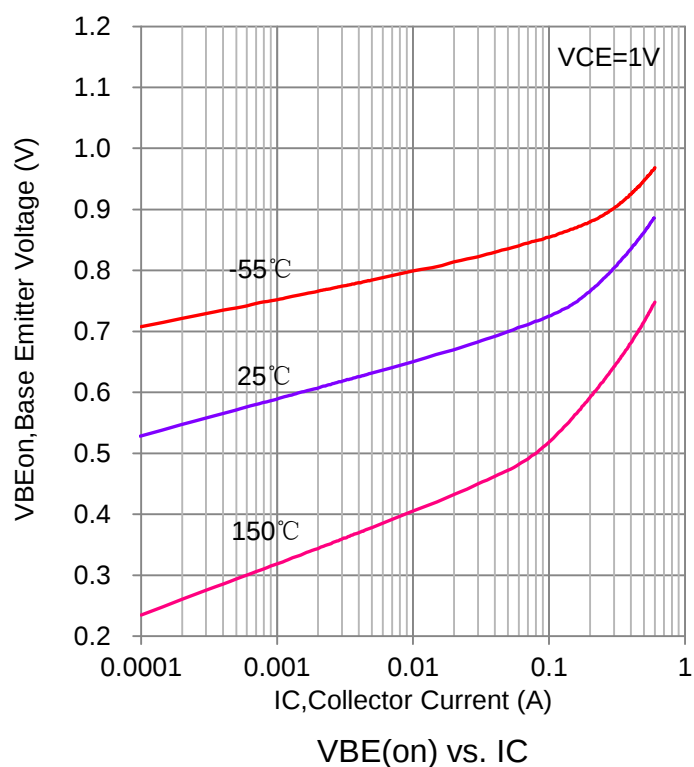
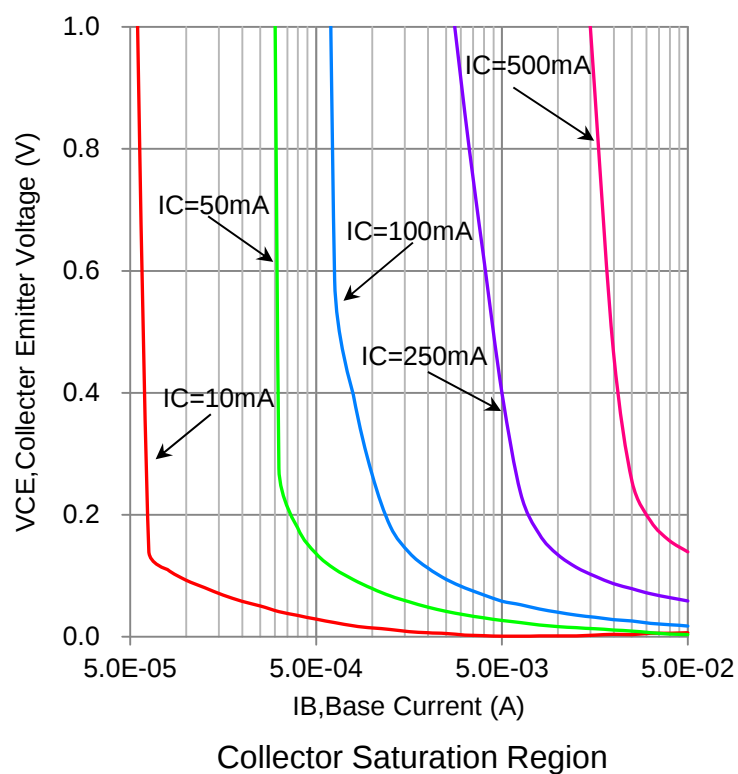
Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector–Emitter Breakdown Voltage(Note 2) (IC = -1 mA, IB = 0)	VBR(CEO)	-80	-	-	V
Emitter–Base Breakdown Voltage (IE = -100 μ A, IC = 0)	VBR(EBO)	-4	-	-	V
Collector–Base Breakdown Voltage (IC= -100 μ A, IE= 0)	VBR(CBO)	-80	-	-	V
Collector Cutoff Current (VCE = - 60 V, IE = 0)	ICES	-	-	-0.1	μ A
Collector Cutoff Current (VCB = - 80 V, IE = 0)	ICBO	-	-	-100	nA
Emitter-Base cut-off current (IC = 0, VEB = -6V)	IEBO	-	-	-100	nA
Collector-Emitter cutoff Current (VCE = -80V, IB=0)	ICEO	-	-	-10	μ A
DC Current Gain (IC = -10 mA, VCE = -1 V) (IC = -100 mA, VCE = -1 V)	HFE	100 100	- -	- 300	
Collector–Emitter Saturation Voltage (IC = -100 mA, IB = -10 mA)	VCE(sat)	-	-	-0.25	V
Base-Emitter turn on voltage (IC = -100 mA, VCE = -1 V)	VBE(on)	-	-	-1.2	V
Current–Gain — Bandwidth Product (IC = -100mA, VCE= -1V, f = 100MHz)	fT	50	-	-	MHz
Output Capacitance (VCB=-10V,IE=0,f=1MHz)	Cobo	-	5.3	-	pF
Input Capacitance (VEB=-0.5V,IC=0,f=1MHz)	Cibo	-	78	-	pF

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

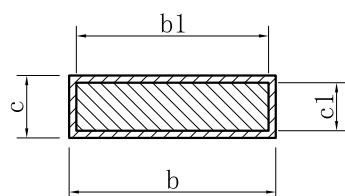
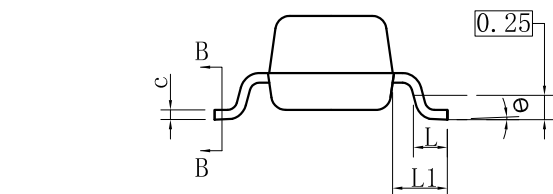
6. ELECTRICAL CHARACTERISTICS CURVES



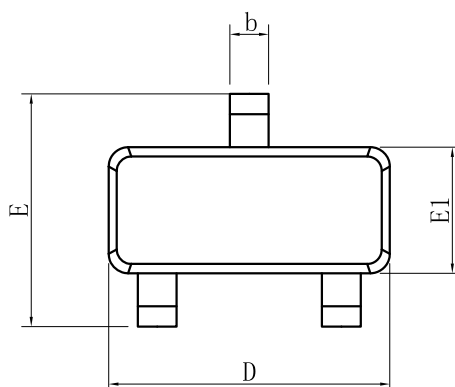
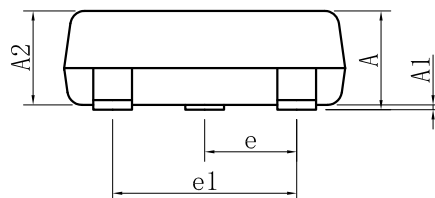
6. ELECTRICAL CHARACTERISTICS CURVES(Con.)



7.OUTLINE AND DIMENSIONS



SECTION B-B

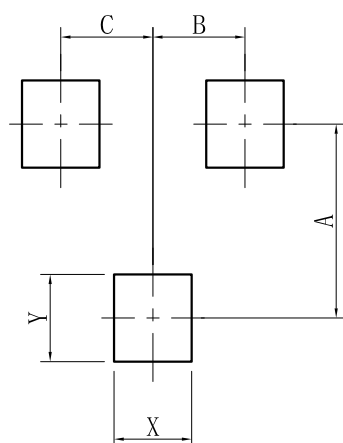


SOT23			
DIM	MIN	NOR	MAX
A	0.89	–	1.12
A1	0.01	–	0.10
A2	0.88	0.95	1.02
b	0.30	–	0.50
b1	0.30	0.40	0.45
c	0.08	–	0.20
c1	0.08	0.10	0.16
D	2.80	2.90	3.04
E	2.10	–	2.64
E1	1.20	1.30	1.40
e	0.95BSC		
e1	1.90BSC		
L	0.40	0.46	0.60
L1	0.54REF		
θ	0°	–	8°
All Dimensions in mm			

GENERAL NOTES

- 1.Top package surface finish $Ra0.4 \pm 0.2\mu m$
- 2.Bottom package surface finish $Ra0.7 \pm 0.2\mu m$
- 3.Side package surface finish $Ra0.4 \pm 0.2\mu m$

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.
- Before you use our Products for new Project, you are requested to carefully read this document and fully understand its contents. LRC shall not be in any way responsible or liable for failure, malfunction or accident arising from the use of any LRC's Products against warning, caution or note contained in this document.
- All information contained in this document is current as of the issuing date and subject to change without any prior notice. Before purchasing or using LRC's Products, please confirm the latest information with a LRC sales representative.