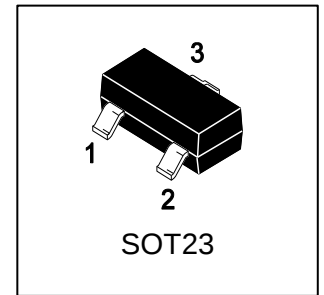


LMBTA06LT1G

Driver Transistors

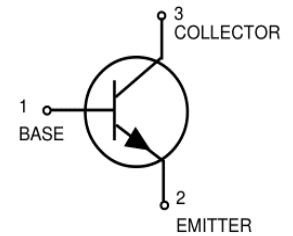
1. FEATURES

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



2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LMBTA06LT1G	1GM	3000/Tape&Reel
LMBTA06LT3G	1GM	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-continuoun	IC	500	mA

4. THERMAL CHARACTERISTICS

Parameter	Symbol	Value	Unit
Total Device Dissipation FR-5 Board (Note 1) TA = 25°C Derate above 25°C	PD	225 1.8	mW mW/°C
Thermal Resistance, Junction to Ambient	RθJA	556	°C/W
Total Device Dissipation Alumina Substrate(Note 2) TA = 25°C Derate above 25°C	PD	300 2.4	mW mW/°C
Thermal Resistance, Junction to Ambient	RθJA	417	°C/W
Total Device Dissipation FR-4 (Note 3) TA = 25°C Derate above 25°C	PD	330 2.64	mW mW/°C
Thermal Resistance, Junction to Ambient	RθJA	378	°C/W
Junction and Storage Temperature	TJ , Tstg	-55~+150	°C

1. FR-5 = 1.0 x 0.75 x 0.062 in.

2. Alumina = 0.4 x 0.3 x 0.024 in. 99.5% alumina.

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

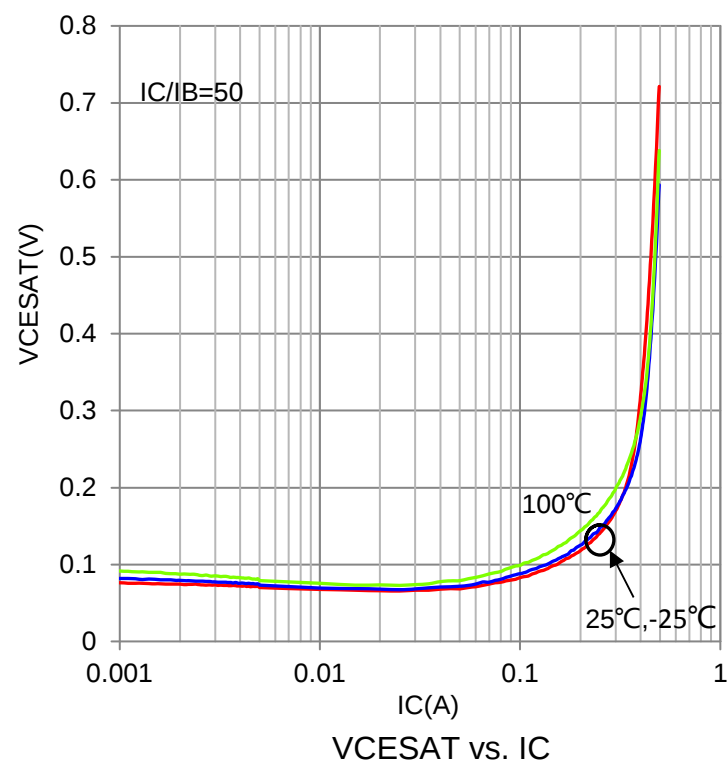
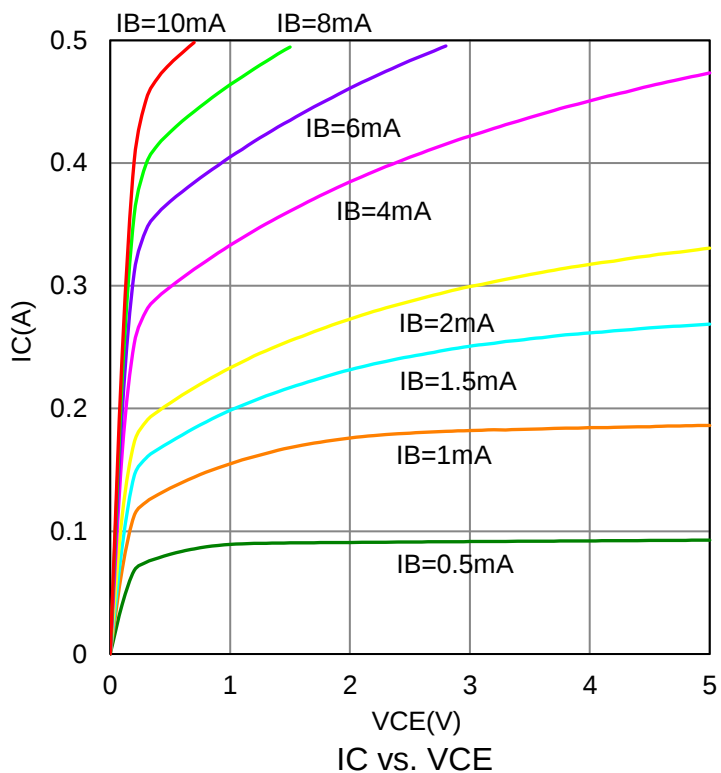
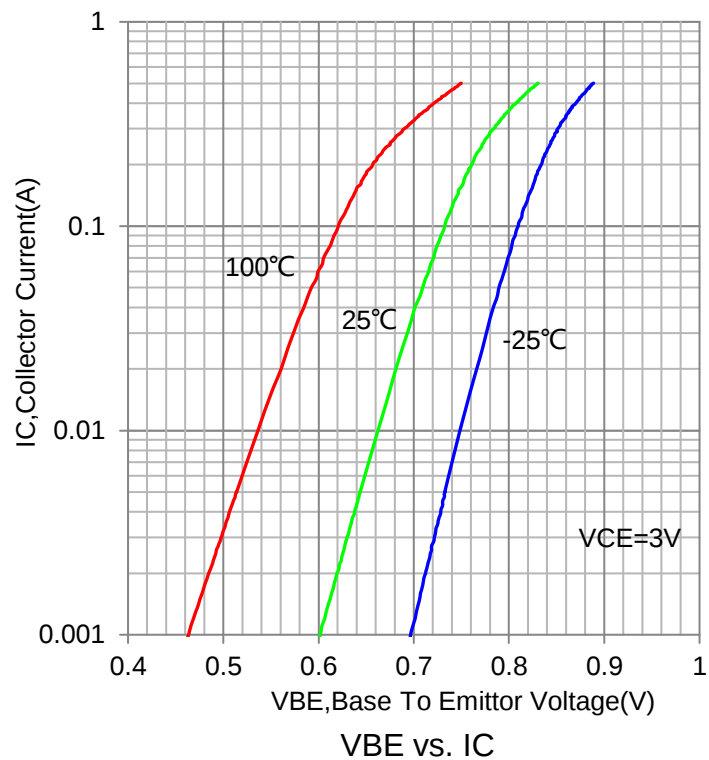
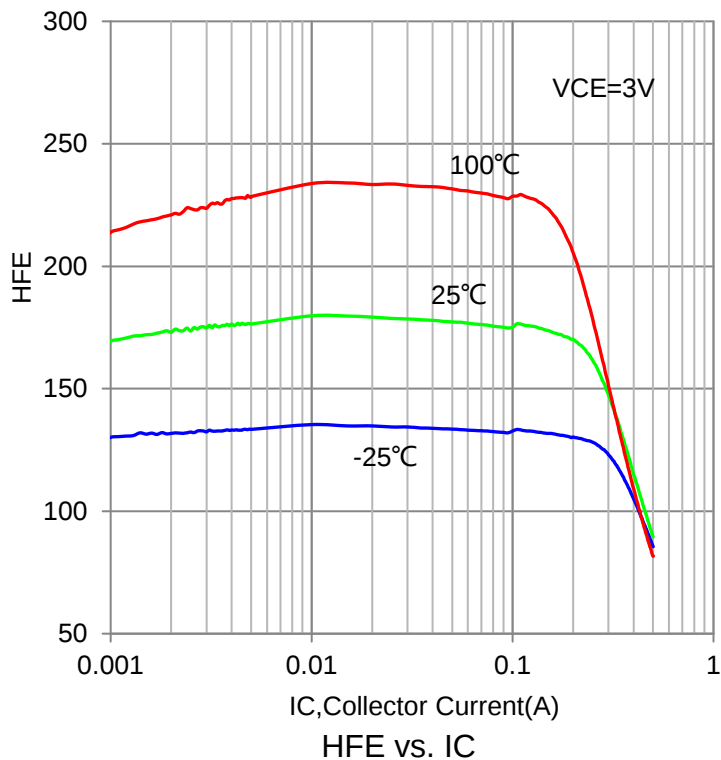
5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS					
Collector–Emitter Breakdown Voltage(Note 4) (IC =1.0 mA, IB = 0)	V(BR)CEO	80	-	-	V
Emitter–Base Breakdown Voltage (IE = 100 μA, IC = 0)	V(BR)EBO	4	-	-	V
Collector-Base Breakdown voltage (IC = 100μA, IE = 0)	V(BR)CBO	80	-	-	V
Collector Cutoff Current (VCE = 60V, IB = 0)	ICES	-	-	0.1	μA
Collector Cutoff Current (VCB = 80V, IE = 0)	ICBO	-	-	0.1	μA
Emitter Cutoff Current (VEB = 4V, IC = 0)	IEBO	-	-	0.1	μA
ON CHARACTERISTICS					
DC Current Gain (IC = 10 mA, VCE = 1.0 V) (IC = 100 mA, VCE = 1.0 V)	hFE	100 100	- -	- -	
Collector–Emitter Saturation Voltage (IC = 100 mA, IB = 10 mA)	VCE(sat)	-	-	0.25	V
Base–Emitter Saturation Voltage (IC = 100 mA, IB = 10 mA)	VBE(sat)	-	-	1.2	V
SMALL–SIGNAL CHARACTERISTICS					
Current –Gain – Bandwidth Product(Note 5) (VCE = 2.0 V, IC = 10mA, f = 100 MHz)	fT	100	-	-	MHz

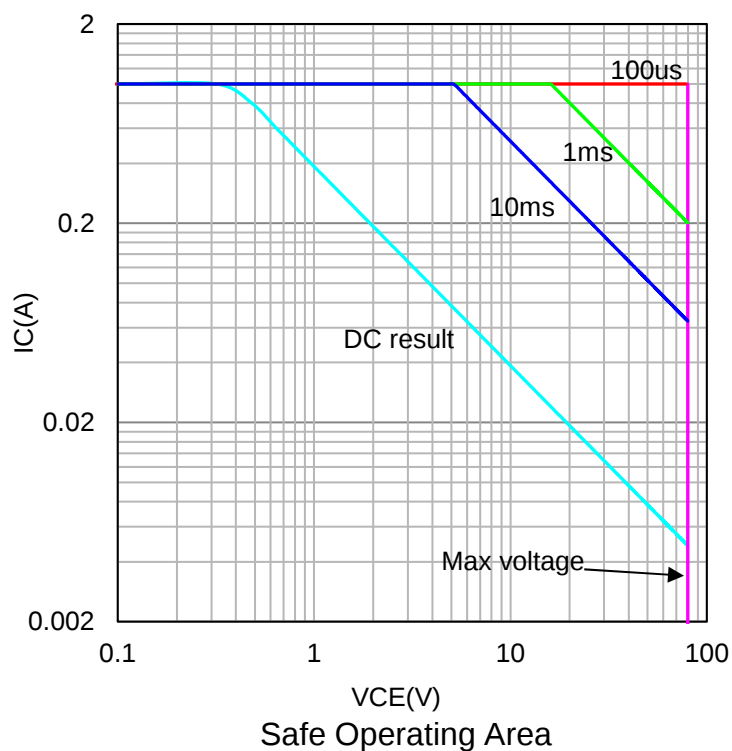
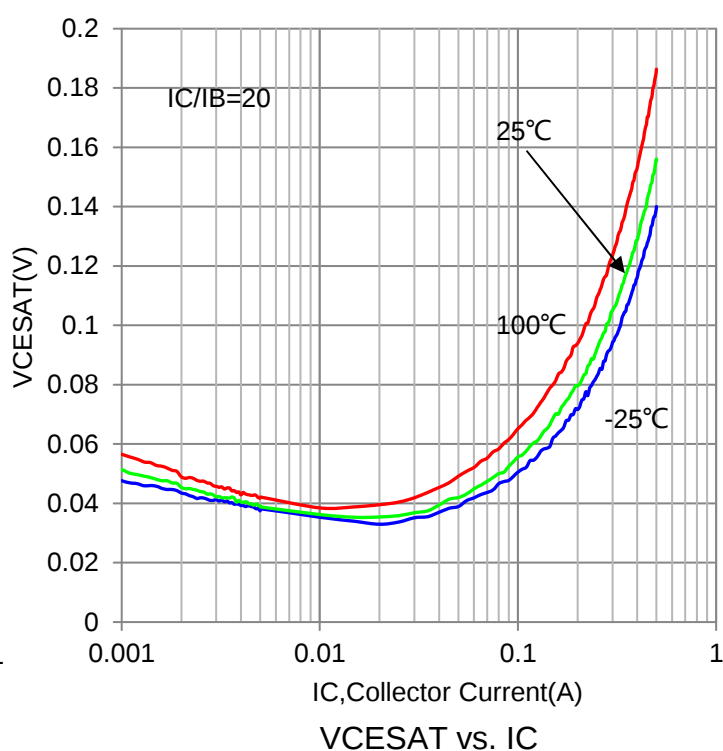
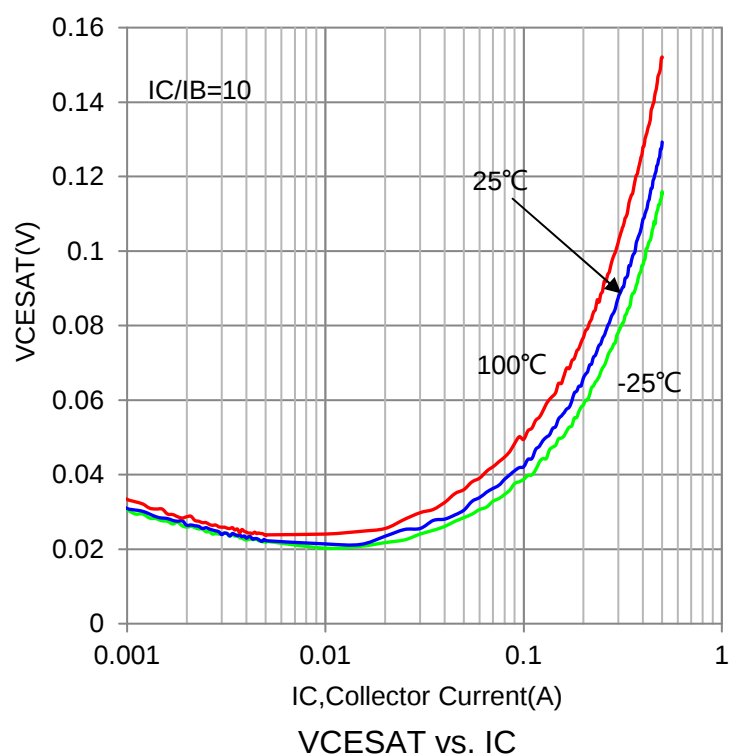
4. Pulse Test: Pulse Width $\leq 300 \mu s$, Duty Cycle $\leq 2.0\%$.

5. fT is defined as the frequency at which |hfe| extrapolates to unity.

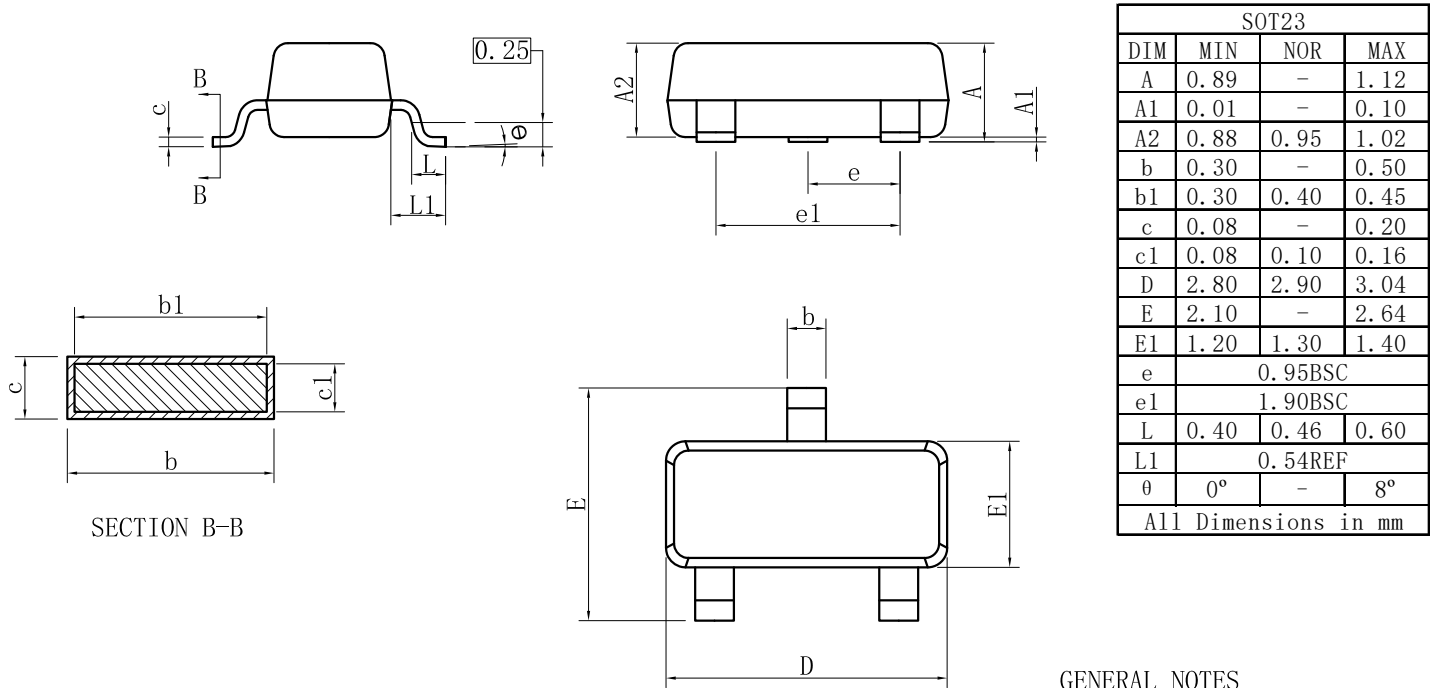
6.ELECTRICAL CHARACTERISTICS CURVES



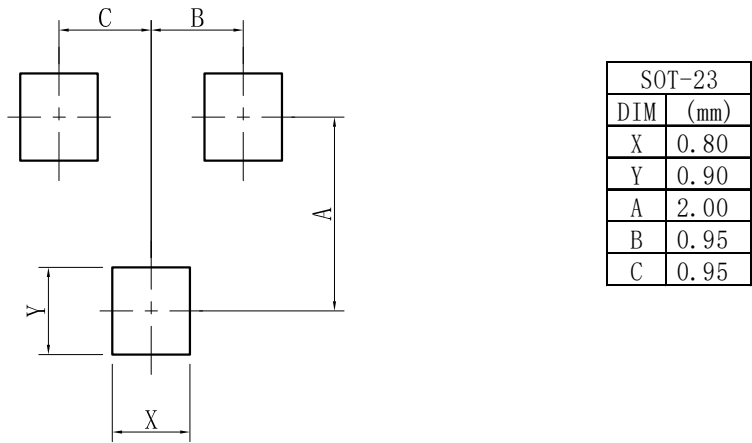
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



7.OUTLINE AND DIMENSIONS



8.SOLDERING FOOTPRINT



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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