LMBTA94LT1G

PNP EPITAXIAL PLANAR TRANSISTOR

LMBTA94LT1G

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We declare that the material of product
compliance with RoHS requirements.

Description

The LMBTA94LT1G is designed for application
that requires high voltage.

Features

- High Breakdown Voltage: VCEO=400(Min.) at IC=1mA
- Complementary to LMBTA94LT1G

DEVICE MARKING

LMBTA94LT1G = 4Z

Absolute Maximum Ratings

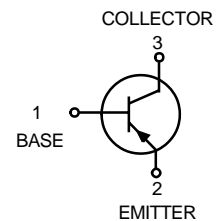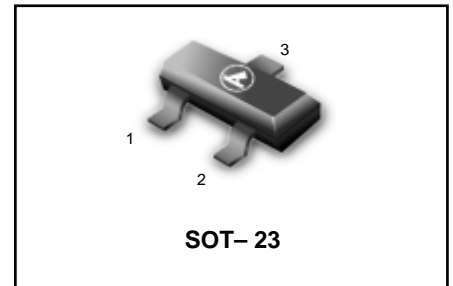- Maximum Temperatures
  Storage Temperature .... -55 ~ +150 °C
  Junction Temperature .... +150 °C Maximum
- Maximum Power Dissipation
  Total Power Dissipation (Ta=25°C) .... 350 mW
- Maximum Voltages and Currents (Ta=25°C)
  VCBO Collector to Base Voltage .... -400 V
  VCEO Collector to Emitter Voltage .... -400 V
  VEBO Emitter to Base Voltage .... -6 V
  IC Collector Current .... -150 mA

Characteristics (Ta=25 C)

Symbol	Min.	Typ.	Max.	Unit	Test Conditions
BVCBO	-400	-	-	V	IC=-100uA, IE=0
BVCEO	-400	-	-	V	IC=-1mA, IB=0
BVEBO	-6	-	-	V	IE=-10uA, IC=0
ICBO	-	-	-100	nA	VCB=-400V, IE=0
IEBO	-	-	-100	nA	VEB=-6V, IC=0
ICES	-	-	-500	nA	VCE=-400V, VBE=0
*VCE(sat)1	-	-	-200	mV	IC=-1mA, IB=-0.1mA
*VCE(sat)2	-	-	-300	mV	IC=-10mA, IB=-1mA
*VCE(sat)3	-	-	-600	mV	IC=-50mA, IB=-5mA
*VBE(sat)	-	-	-900	mV	IC=-10mA, IB=-1mA
*hFE1	50	-	-		VCE=-10V, IC=-1mA
*hFE2	75	-	200		VCE=-10V, IC=-10mA
*hFE3	60	-	-		VCE=-10V, IC=-50mA
*hFE4	20	-	-		VCE=-10V, IC=-100mA
Cob	-	4	6	pF	VCE=-10V, f=1MHz

*Pulse Test: Pulse Width ≤380us, Duty Cycle≤2%

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Characteristics Curve

Current Gain & Collector Current

hFE @ V_{CE}=3V

Current Gain & Collector Current

hFE @ V_{CE}=10V

Saturation Voltage & Collector Current

$V_{CE(sat)}$ @ I_C=10I_B

Saturation Voltage & Collector Current

$V_{BE(sat)}$ @ I_C=10I_B

Capacitance & Reverse-Biased Voltage
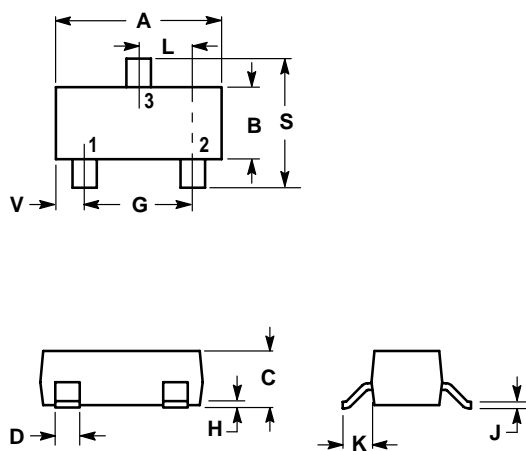

Cob
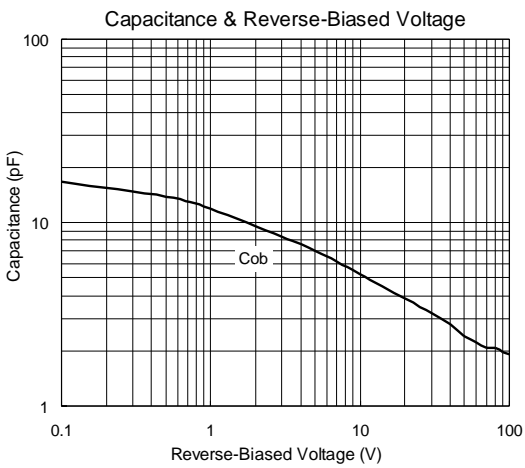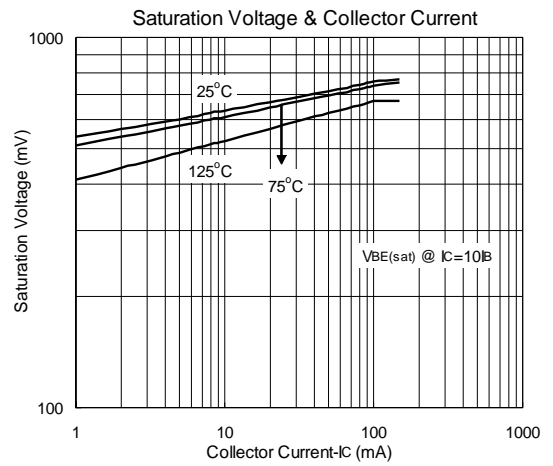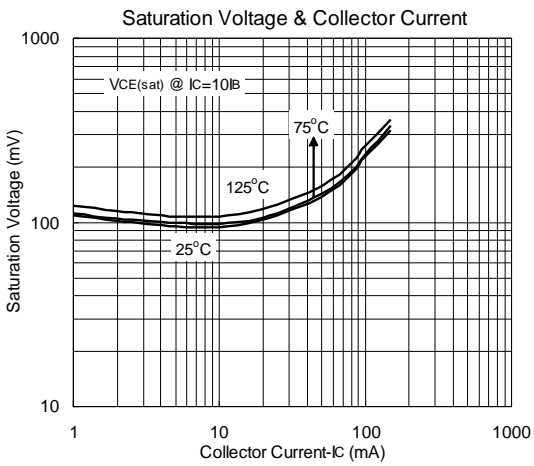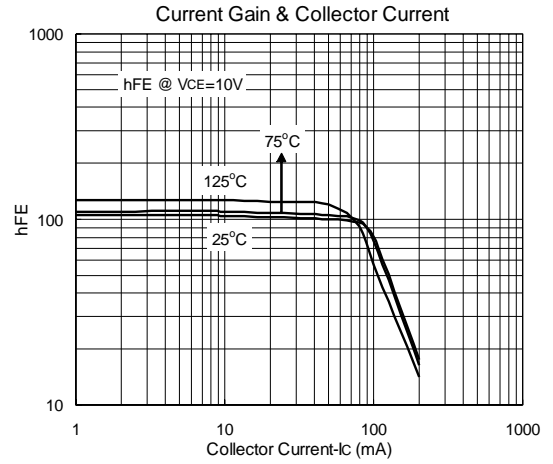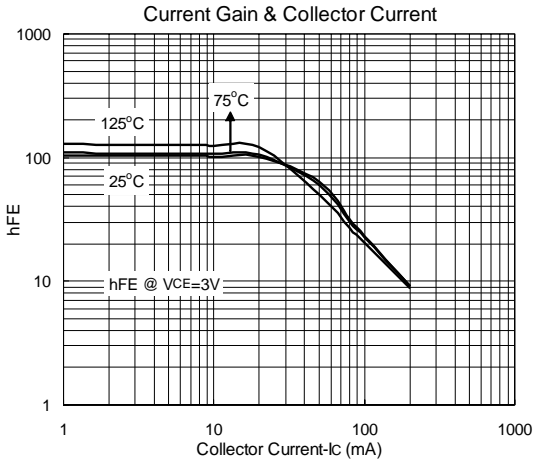
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NOTES:

1. DIMENSIONING AND TOLERANCING PER ANSI
   Y14.5M,1982
2. CONTROLLING DIMENSION: INCH.

DIM	INCHES		MILLIMETERS	
	MIN	**MAX**	**MIN**	**MAX**
A	0.1102	0.1197	2.80	3.04
B	0.0472	0.0551	1.20	1.40
C	0.0350	0.0440	0.89	1.11
D	0.0150	0.0200	0.37	0.50
G	0.0701	0.0807	1.78	2.04
H	0.0005	0.0040	0.013	0.100
J	0.0034	0.0070	0.085	0.177
K	0.0140	0.0285	0.35	0.69
L	0.0350	0.0401	0.89	1.02
S	0.0830	0.1039	2.10	2.64
V	0.0177	0.0236	0.45	0.60

PIN 1. BASE
    2. EMITTER
    3. COLLECTOR

$\dfrac{0.037}{0.95}$

$\dfrac{0.037}{0.95}$

$\dfrac{0.079}{2.0}$

$\dfrac{0.035}{0.9}$

$\dfrac{0.031}{0.8}$

$\left(\dfrac{\text{inches}}{\text{mm}}\right)$