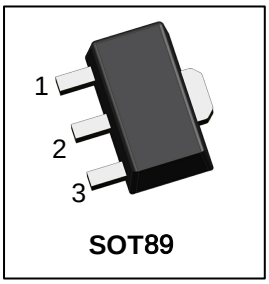
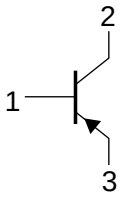
LBTP180Y3T1G
S-LBTP180Y3T1G

PNP medium power transistors





1. FEATURES

- High current
- Low voltage
- 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.APPLICATIONS

- Medium power general purposes.
- Driver stages of audio amplifiers.

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBTP180Y3T1G	E	1000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	-80	V
Collector–Base Voltage	VCBO	-100	V
Emitter–Base Voltage	VEBO	-5	V
Collector Current(DC)	IC	-1	A
Peak collector current	ICM	-1.5	A
Peak base current	IBM	-200	mA

5. THERMAL CHARACTERISTICS

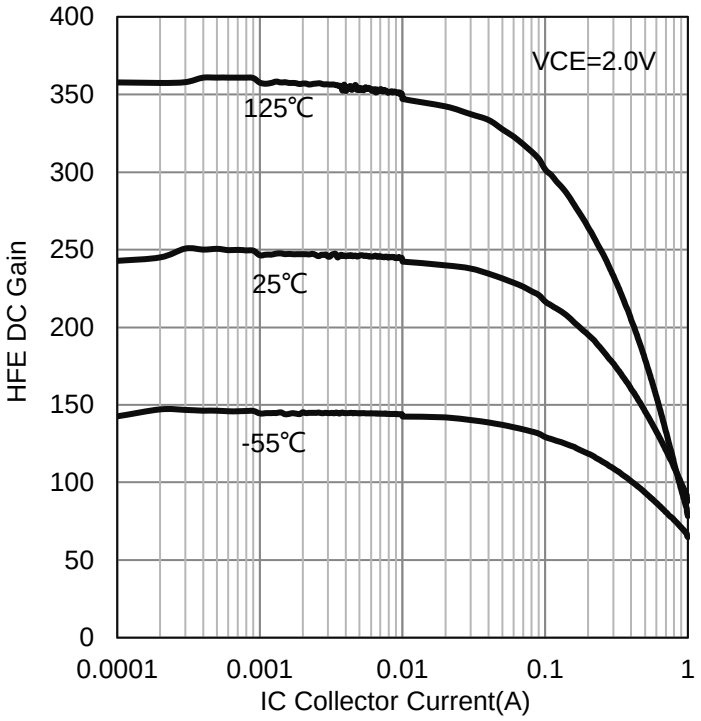
Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR−4 Board (Note 1) @ TA = 25ºC Derate above 25ºC	PD	550 4.4	mW mW/ºC
Thermal Resistance, Junction–to–Ambient	RΘJA	225	ºC/W
Junction and Storage temperature	TJ,Tstg	−65~+150	° C

1.PCB Size:30.0mm×25.0mm×1.6mm,FR-4 Board;

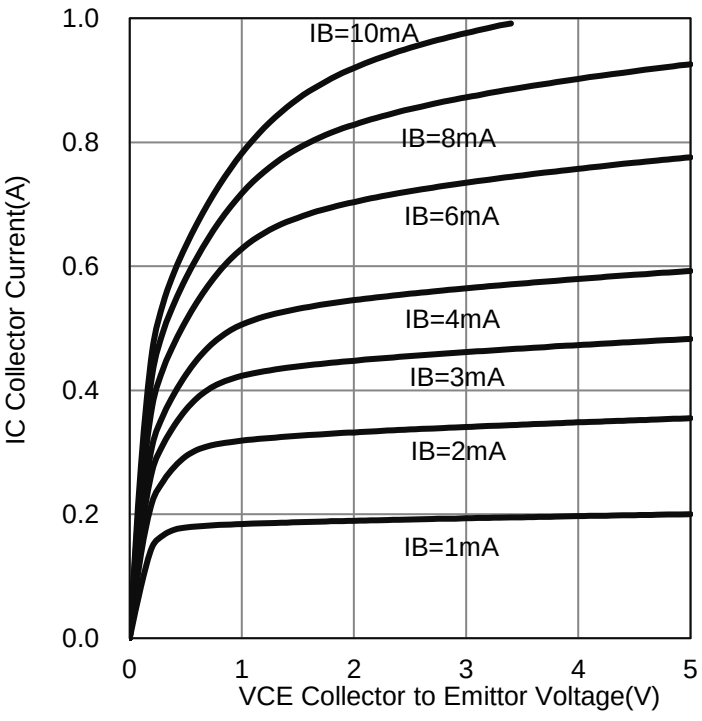
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector Cutoff Current					
(VCB = -30 V,IE = 0)	ICBO	-	-	-100	nA
(VCB = -30 V,IE = 0,Tj = 125 °C)		-	-	-10	μA
Emitter Cut-off Current	IEBO				
(VEB =-5V, IC =0)		-	-	-100	nA
DC Current Gain					
(VCE =-2V, IC =-5mA)	HFE	40	-	-	
(VCE =-2V, IC =-150mA)		100	-	250	
(VCE =-2V, IC =-500mA)		25	-	-	
Collector–Emitter Saturation Voltage	VCE(sat)				mV
(IC = −500 mA, IB = −50 mA)		-	-	-500	
Base-emitter voltage	VBE				V
(IC = −500 mA,VCE = −2 V)		-	-	-1	
Transition Frequency	fT				MHz
(IC = −10 mA,VCE = −5 V,f = 100 MHz)		-	50	-	

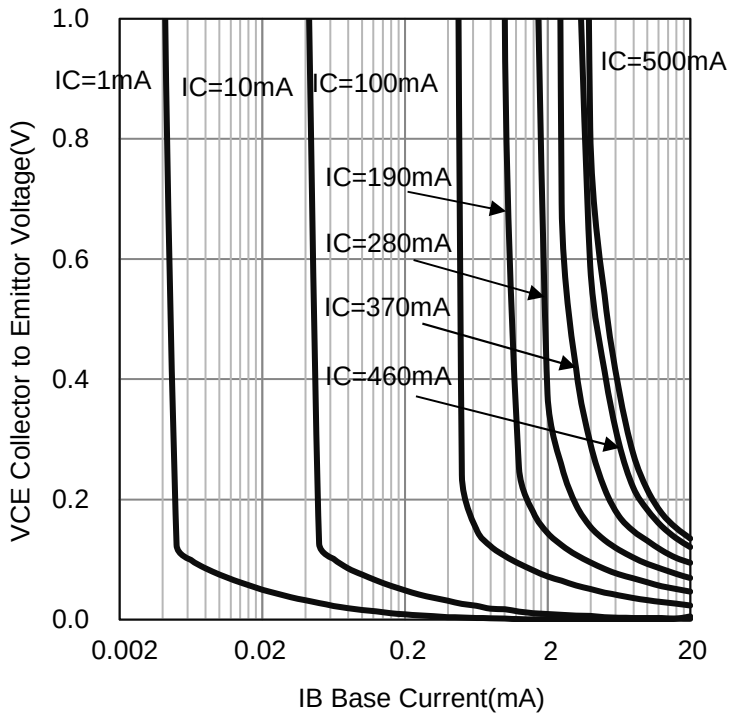
7.ELECTRICAL CHARACTERISTICS CURVES



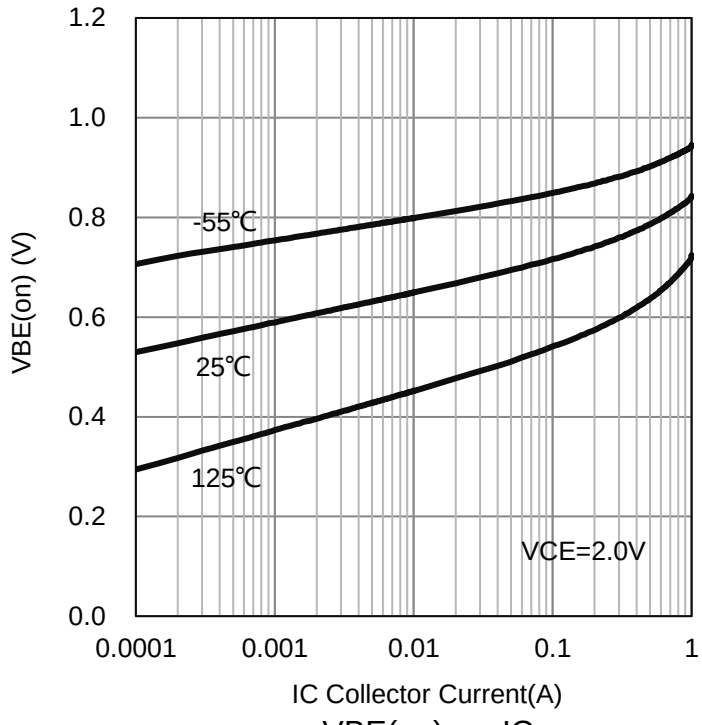
HFE vs. IC



IC vs. VCE

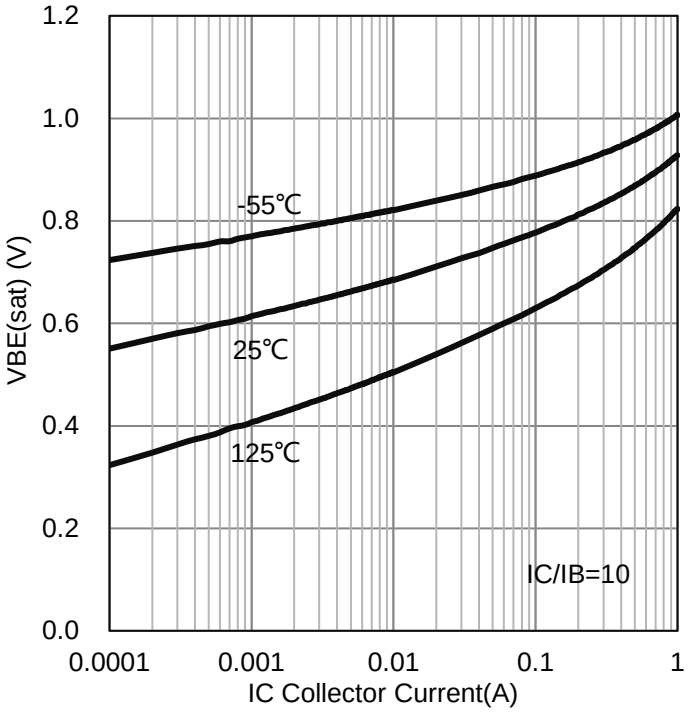


VCE vs. IB

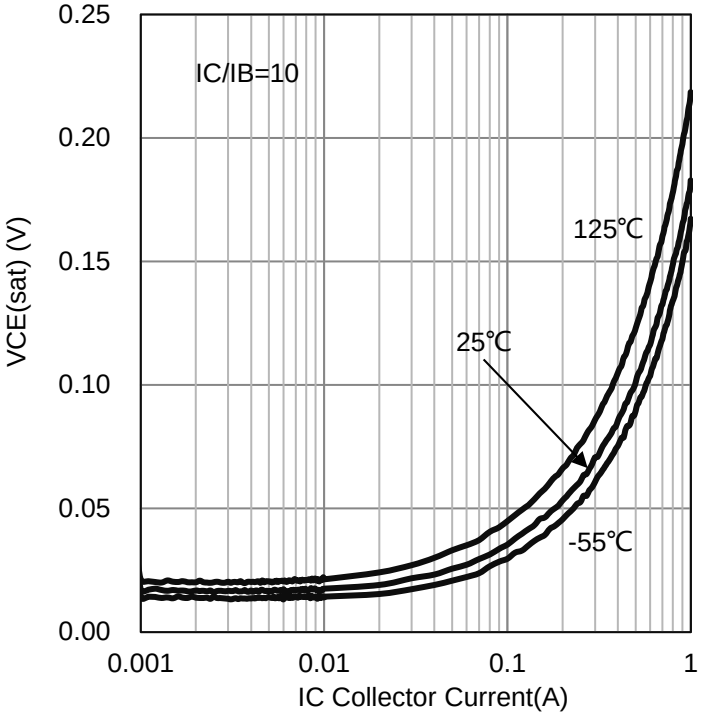


VBE(on) vs. IC

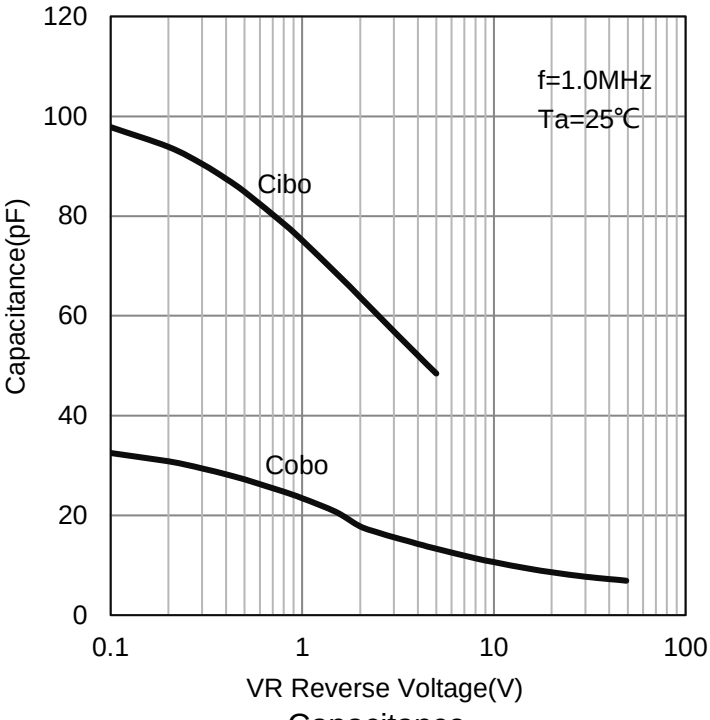
7.ELECTRICAL CHARACTERISTICS CURVES(Con.)



VBE(sat) vs. IC

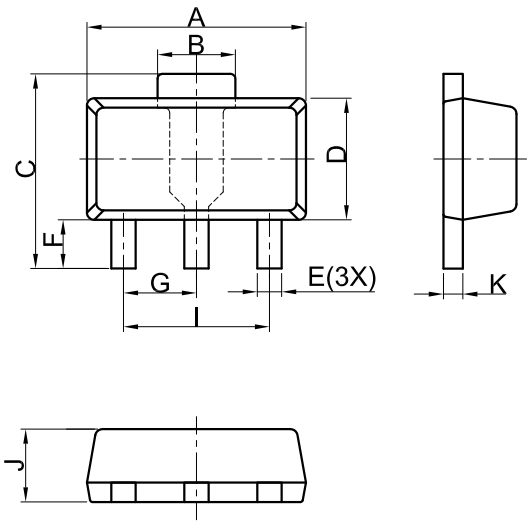


VCE(sat) vs. IC



Capacitance

8.OUTLINE AND DIMENSIONS

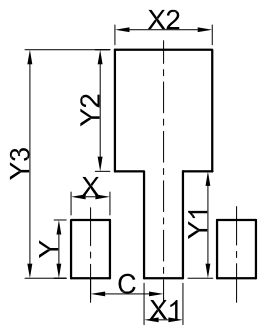


SOT89			
DIM	MIN	NOR	MAX
A	4.30	4.50	4.70
B	1.40	1.60	1.80
C	3.90	4.00	4.25
D	2.30	2.50	2.70
E	0.40	0.50	0.58
F	0.90	1.00	1.20
G	1.50 BSC		
I	3.00 BSC		
J	1.40	1.50	1.60
K	0.34	0.40	0.50
All Dimensions in mm			

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
4. Protrusion or Gate Burrs shall not exceed 0.10mm per side.

9.SOLDERING FOOTPRINT



SOT89	
DIM	(mm)
X	0.80
Y	1.20
X1	0.80
Y1	2.20
X2	2.00
Y2	2.50
C	1.50
Y3	4.70