

S-LBTP180D3T1G

General Purpose Transistors PNP Silicon

1. FEATURES

- High current
- High power dissipation capability
- 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
S-LBTP180D3T1G	P3	5000/Tape&Reel

4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	-85	V
Collector–Base Voltage	VCBO	-105	V
Emitter–Base Voltage	VEBO	-6	V
Collector Current(DC)	IC	-1	A

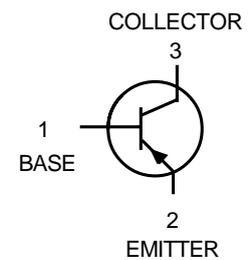
5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-4 Board (Note 1) @ TA = 25°C	PD	488	mW
Thermal Resistance, Junction–to–Ambient	RθJA	256	°C/W
Junction–to–Case	RθJC	55	°C/W
Junction and Storage temperature	TJ, Tstg	-65~+150	°C

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



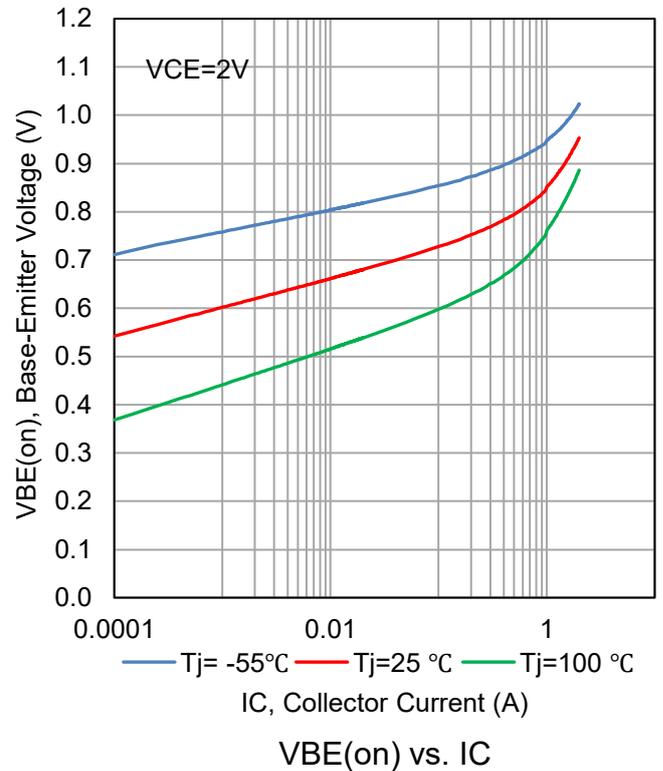
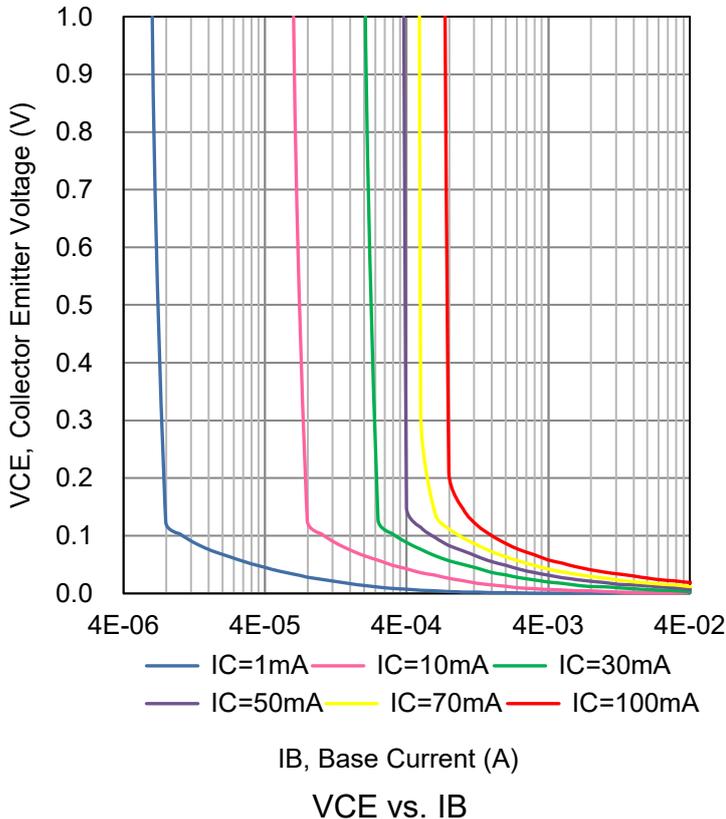
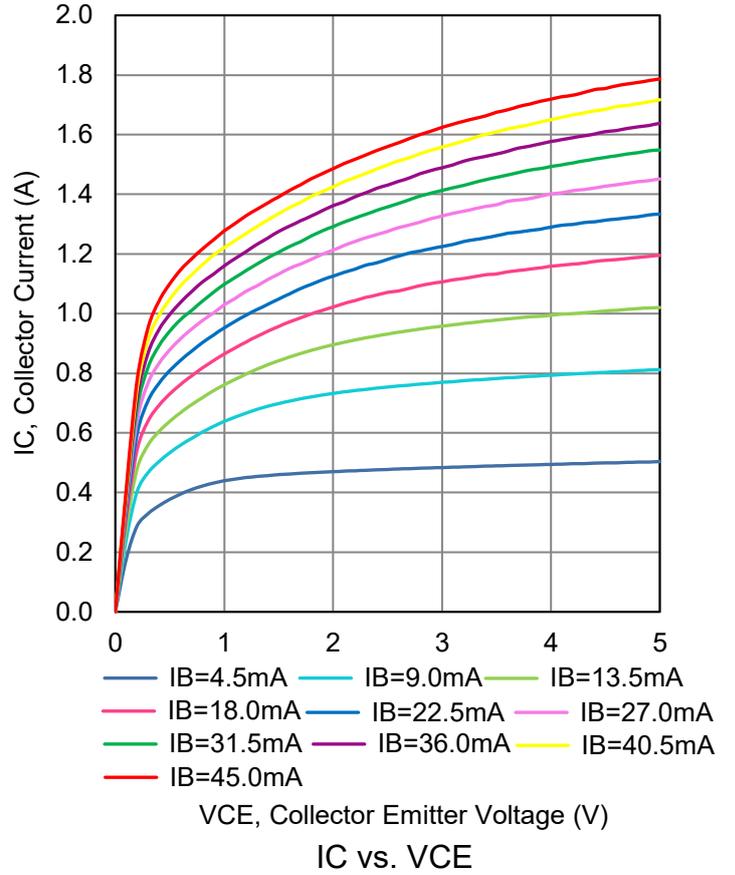
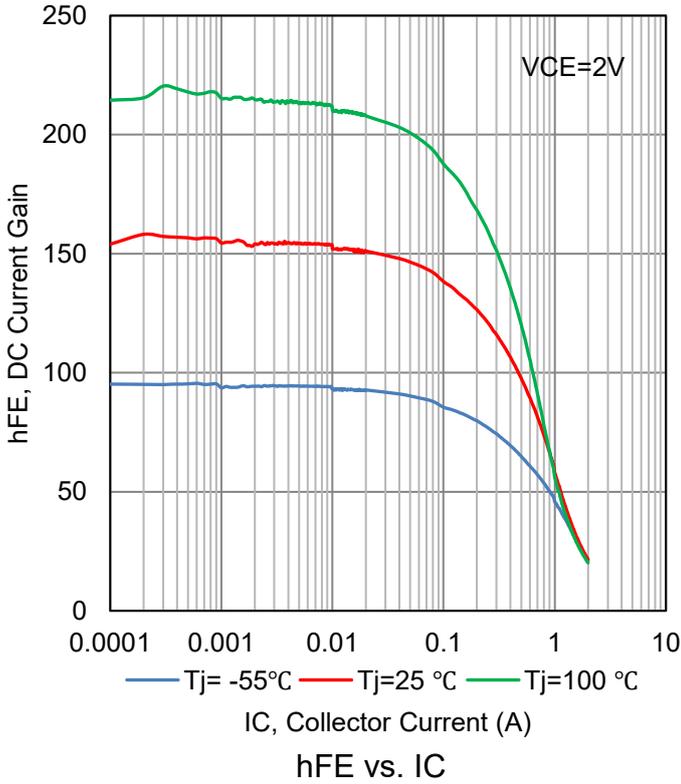
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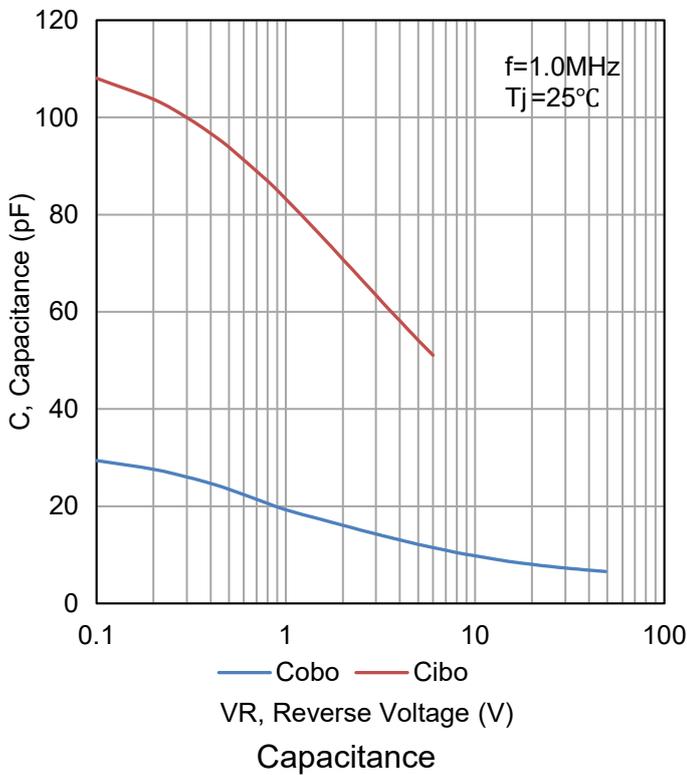
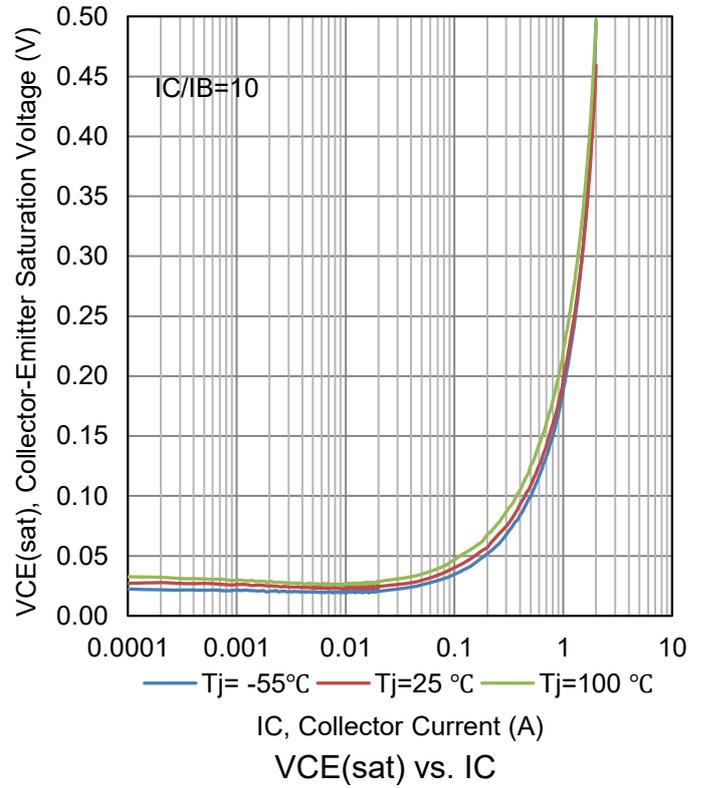
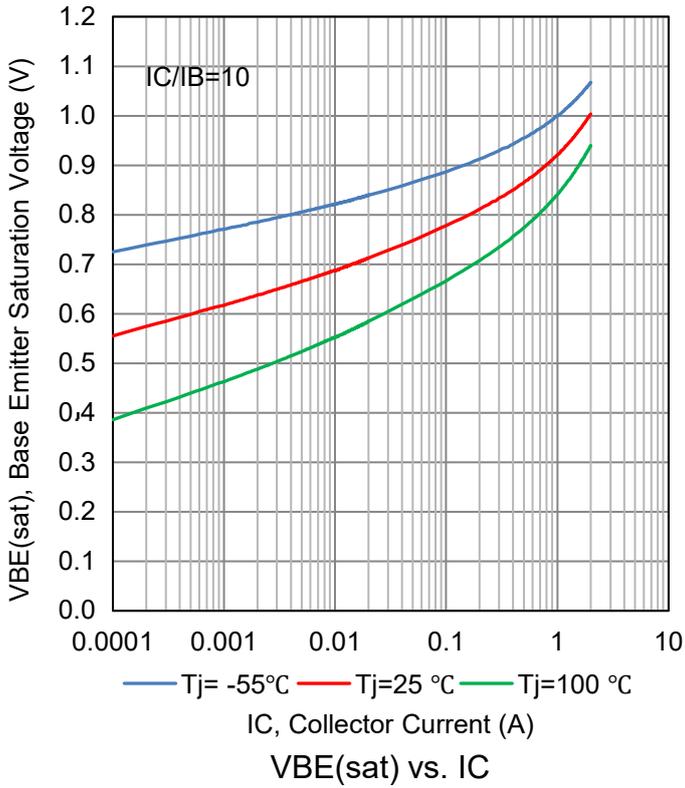
6. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Collector–Emitter Breakdown Voltage (IC = -1 mA, IB = 0)	VBR(CEO)	-85	-	-	V
Collector–Base Breakdown Voltage (IC = -100 μA, IE = 0)	VBR(CBO)	-105	-	-	V
Emitter–Base Breakdown Voltage (IE = -100 μA, IC = 0)	VBR(EBO)	-6	-	-	V
Collector Cutoff Current (VCB = -30 V, IE = 0)	ICBO	-	-	-100	nA
Emitter Cut-off Current (VEB = -5V, IC = 0)	IEBO	-	-	-100	nA
Collector-Emitter cutoff Current (VCE = -80V, IB = 0)	ICEO	-	-	-5	μA
DC Current Gain (VCE = -2V, IC = -5mA) (VCE = -2V, IC = -150mA) (VCE = -2V, IC = -500mA)	HFE	63 63 40	- - -	- 250 -	
Collector–Emitter Saturation Voltage (IC = -500 mA, IB = -50 mA)	VCE(sat)	-	-	-500	mV
Base-emitter voltage (IC = -500 mA, VCE = -2 V)	VBE	-	-	-1	V
Transition Frequency (IC = -50 mA, VCE = -5 V, f = 100 MHz)	fT	100	-	-	MHz
Collector Capacitance (IE = Ie = 0, VCB = -10 V, f = 1 MHz)	Cc	-	6	-	pF

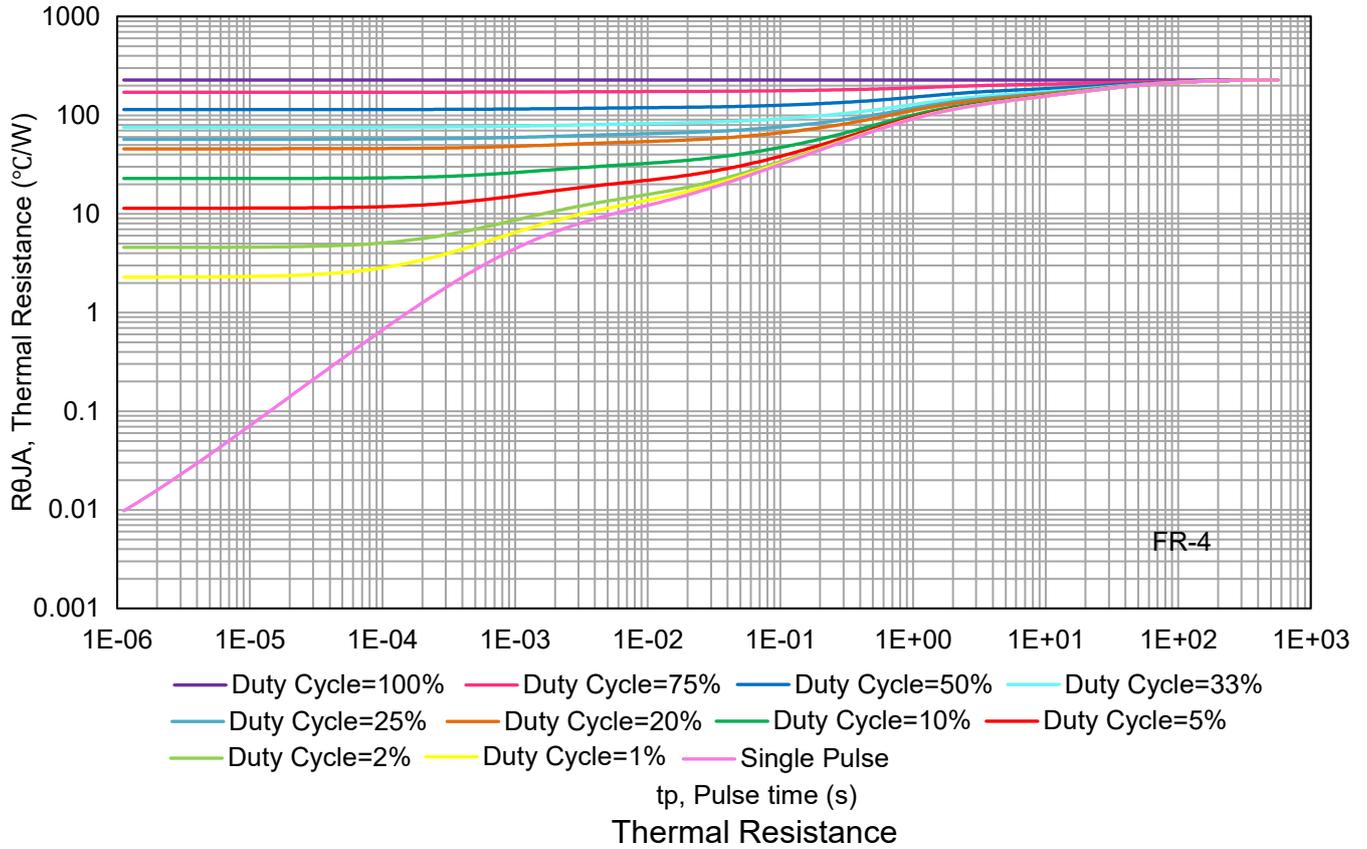
7.ELECTRICAL CHARACTERISTICS CURVES



7.ELECTRICAL CHARACTERISTICS CURVES(Con.)

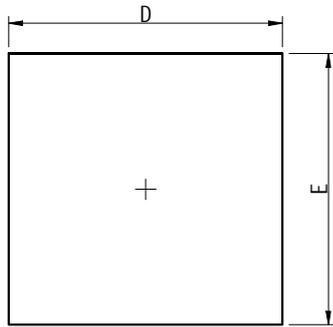


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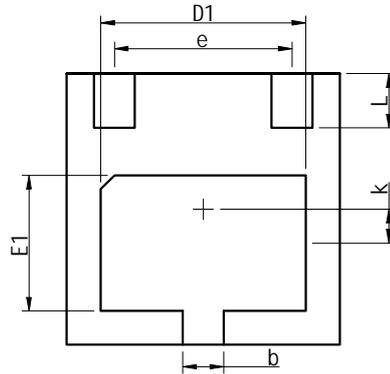


8. OUTLINE AND DIMENSIONS

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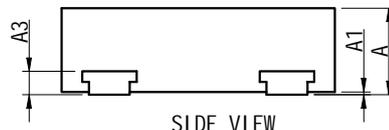


TOP VIEW



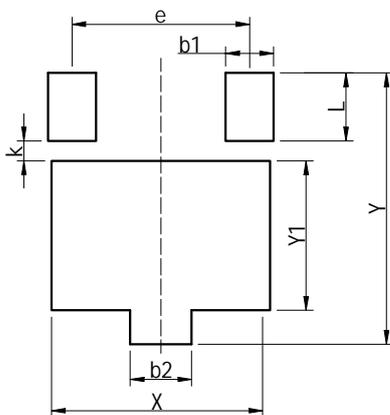
BOTTOM VIEW

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Dim	Min.	Typ.	Max.
A	0.60	0.65	0.70
A1	0.00	0.02	0.05
A3	0.152REF.		
D	1.95	2.00	2.05
E	1.95	2.00	2.05
D1	1.45	1.50	1.55
E1	0.95	1.00	1.05
b	0.25	0.30	0.35
e	1.30TYP.		
k	0.20	0.25	0.30
L	0.35	0.40	0.45
All Dimensions in mm			



SIDE VIEW

9. SOLDERING FOOTPRINT



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Dim	(mm)
X	1.60
Y	2.00
b1	0.35
b2	0.45
L	0.50
Y1	1.10
k	0.15
e	1.30

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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