

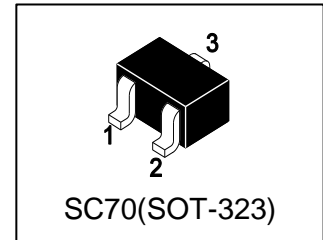
LBC848BWT1G

S-LBC848BWT1G

NPN Silicon General Purpose Transistors

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.

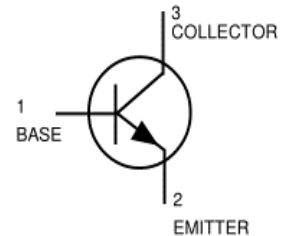


2. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
LBC848BWT1G	1K	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
Collector–Emitter Voltage	VCEO	30	Vdc
Collector–Base Voltage	VCBO	30	Vdc
Emitter–Base Voltage	VEBO	5	Vdc
Collector Current(Continuous)	IC	100	mAdc



4. THERMAL CHARACTERISTICS

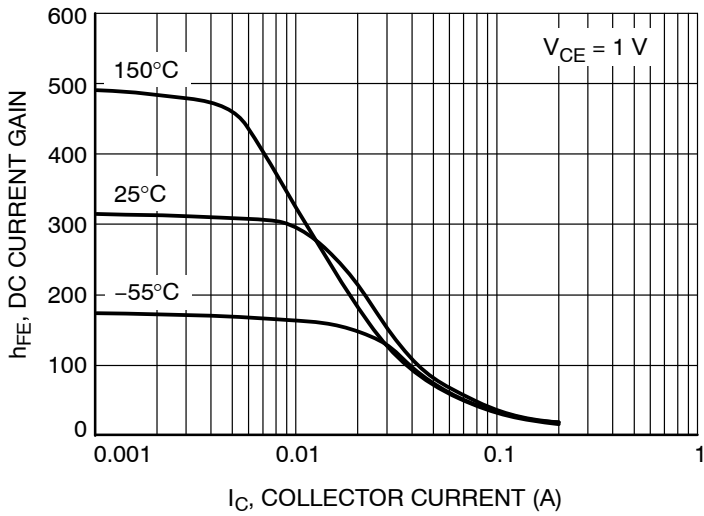
Parameter	Symbol	Limits	Unit
Total Device Dissipation	PD	150	mW
Thermal Resistance, Junction to Ambient	RθJA	833	°C/W
Junction temperature	TJ	-55 ~ +150	°C
Storage temperature	Tstg	-55 ~ +150	°C

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

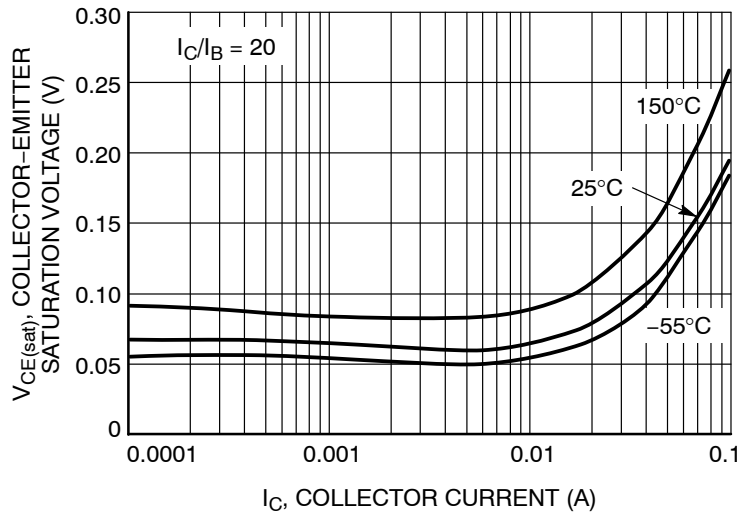
Characteristic	Symbol	Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS					
Collector–Emitter Breakdown Voltage (IC = 10 mA)	V(BR)CEO	30	-	-	V
Collector–Emitter Breakdown Voltage (IC = 10 μA, VEB = 0)	V(BR)CES	30	-	-	V
Collector–Base Breakdown Voltage (IC = 10 μA)	V(BR)CBO	30	-	-	V
Emitter–Base Breakdown Voltage (IE = 1.0 μA)	V(BR)EBO	5	-	-	V
Collector Cutoff Current (VCB = 30 V) (VCB = 30 V, TA = 150°C)	ICBO	- -	- -	15 5	nA μA
ON CHARACTERISTICS					
DC Current Gain (IC = 2.0 mA, VCE = 5.0 V)	hFE	200	290	450	
Collector–Emitter Saturation Voltage (IC = 10 mA, IB = 0.5 mA) (IC = 100 mA, IB = 5.0 mA)	VCE(sat)	- -	- -	0.25 0.6	V
Base–Emitter Saturation Voltage (IC = 10 mA, IB = 0.5 mA) (IC = 100 mA, IB = 5.0 mA)	VBE(sat)	- -	0.7 0.9	- -	V
Base–Emitter Voltage (IC = 2.0 mA, VCE = 5.0 V) (IC = 10 mA, VCE = 5.0 V)	VBE(on)	580 -	660 -	700 770	mV
SMALL–SIGNAL CHARACTERISTICS					
Current–Gain — Bandwidth Product (IC = 10 mA, VCE = 5.0 Vdc, f = 100 MHz)	fT	100	-	-	MHz
Output Capacitance (VCB = 10 V, f = 1.0 MHz)	Cobo	-	-	4.5	pF
Noise Figure(IC = 0.2 mA, VCE = 5.0 V dc , RS = 2.0 kΩ, f = 1.0 KHz, BW = 200 Hz)	NF	-	-	10	dB

1.FR–5=1.0 x 0.75 x 0.062in

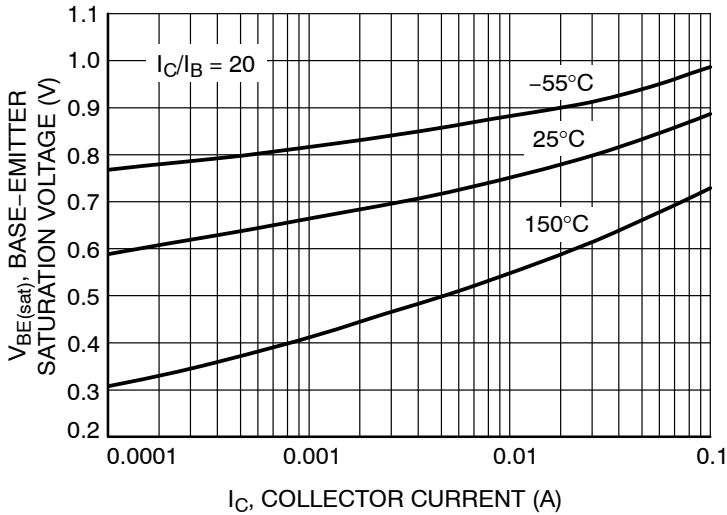
6. ELECTRICAL CHARACTERISTICS CURVES



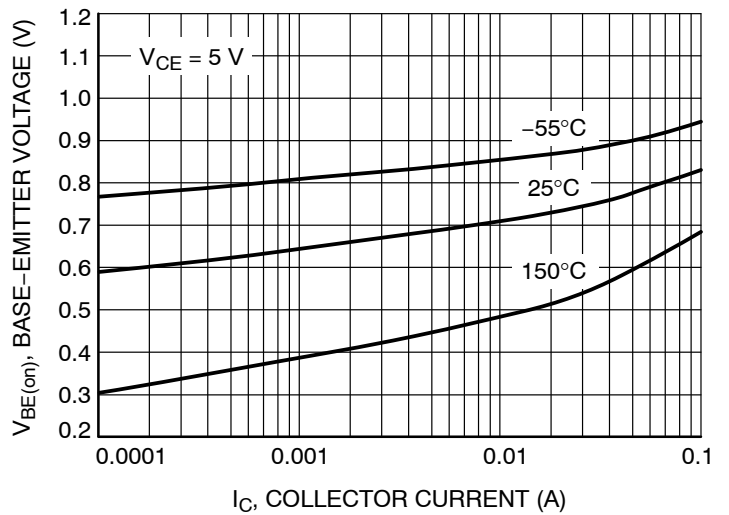
DC Current Gain vs. Collector Current



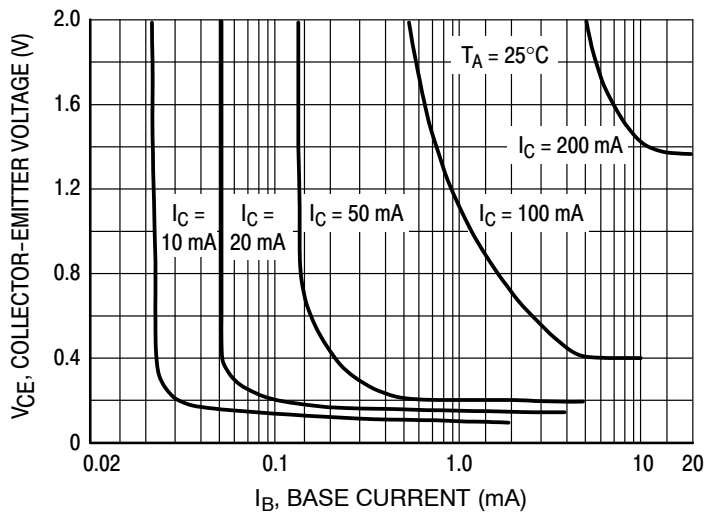
Collector Emitter Saturation Voltage vs. Collector Current



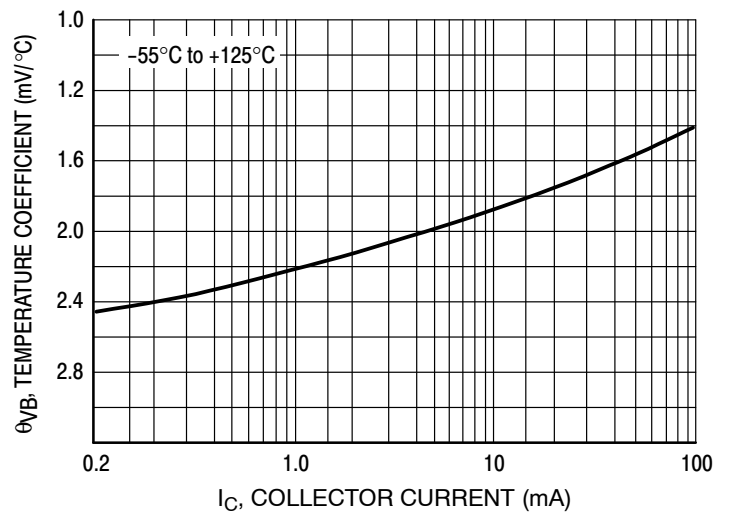
Base Emitter Saturation Voltage vs. Collector Current



Base Emitter Voltage vs. Collector Current

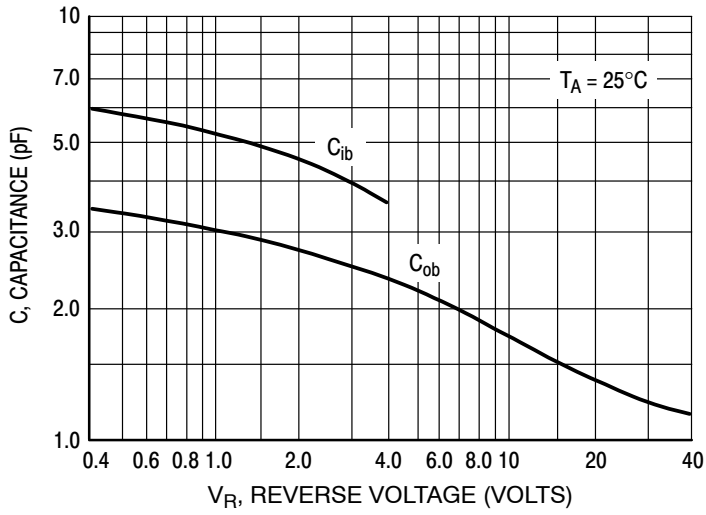


Collector Saturation Region

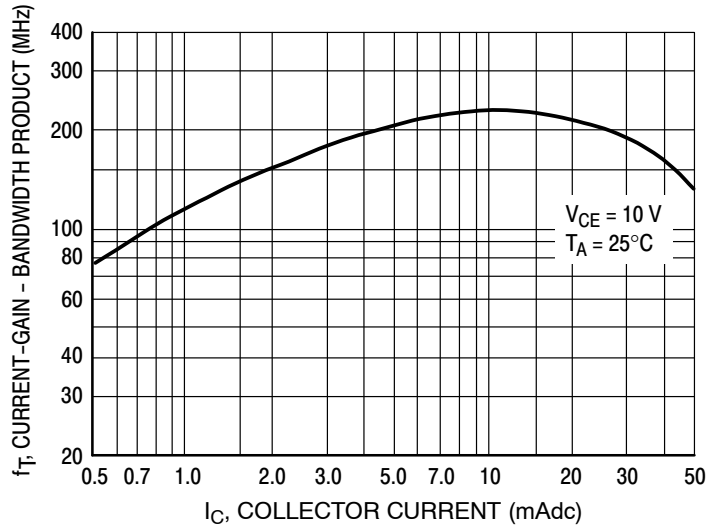


Base -Emitter Temperature Coefficient

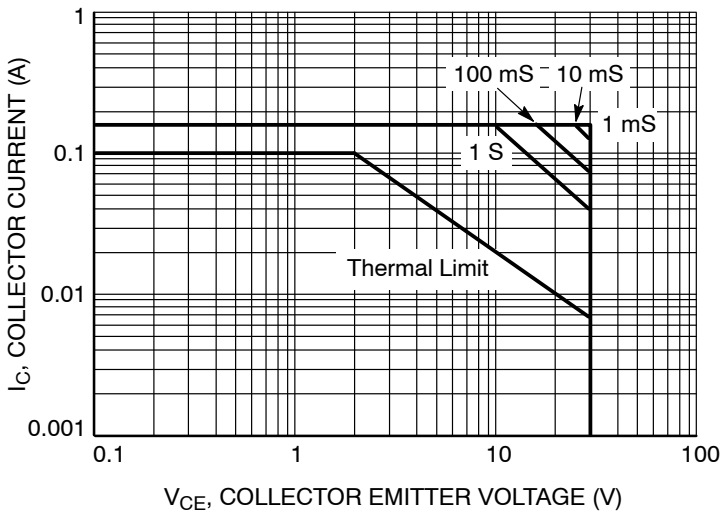
6.ELECTRICAL CHARACTERISTICS CURVES(Con.)



Capacitances



Current -Gain - Bandwidth Product

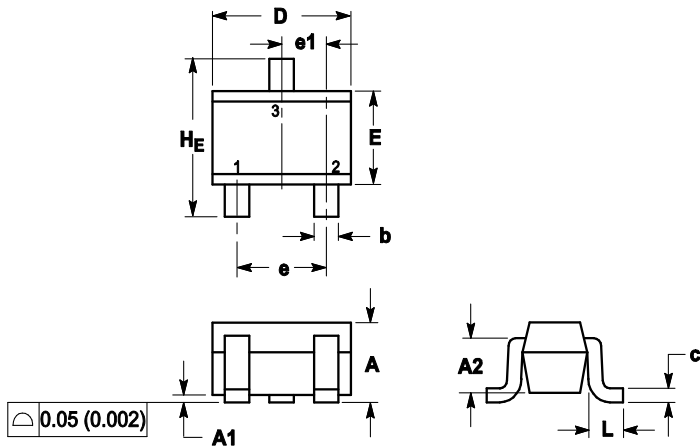


Safe Operating Area

7. OUTLINE AND DIMENSIONS

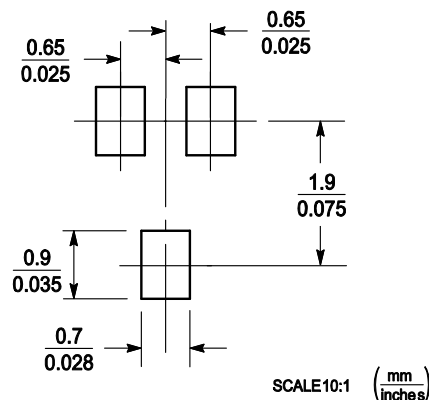
Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.



DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.80	0.90	1.00	0.032	0.035	0.039
A1	0.00	0.05	0.10	0.000	0.002	0.004
A2	0.70REF			0.028REF		
b	0.30	0.35	0.40	0.012	0.014	0.016
c	0.10	0.18	0.25	0.004	0.007	0.010
D	1.80	2.10	2.20	0.071	0.083	0.087
E	1.15	1.24	1.35	0.045	0.049	0.053
e	1.20	1.30	1.40	0.047	0.051	0.055
e1	0.65REF			0.026REF		
L	0.20	0.38	0.56	0.008	0.015	0.022
HE	2.00	2.10	2.40	0.079	0.083	0.095

8. SOLDERING FOOTPRINT



单击下面可查看定价，库存，交付和生命周期等信息

[>>LRC\(乐山无线电\)](#)