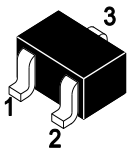
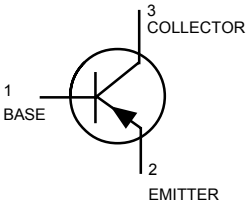
LBC857CWT1G
S-LBC857CWT1G

General Purpose Transistors PNP Silicon



SC70(SOT-323)



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.
- Moisture Sensitivity Level: 1

2. DEVICE MARKING AND RESISTOR VALUES

Device	Marking	Shipping
LBC857CWT1G	3G	3000/Tape&Reel

3. MAXIMUM RATINGS(Ta = 25ºC)

Parameter	Symbol	Limits	Unit
Collector-Emitter Voltage	VCEO	-45	V
Collector-Base Voltage	VCBO	-50	V
Emitter-Base Voltage	VEBO	-5	V
Continuous Collector Current	IC	-100	mA

4. THERMAL CHARACTERISTICS

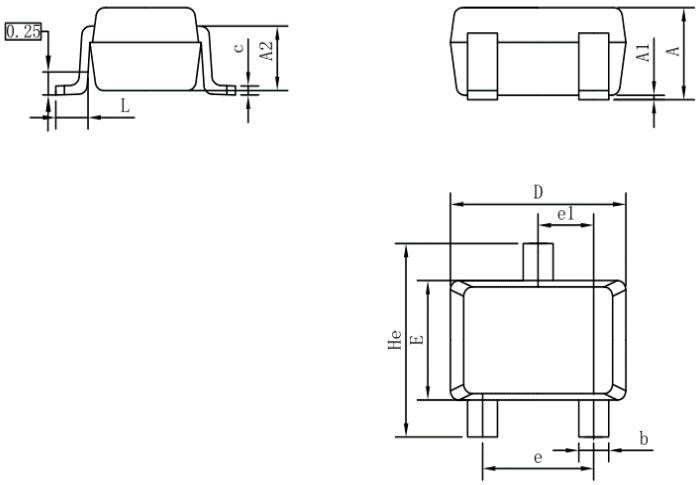
Parameter	Symbol	Limits	Unit
Total Device Dissipation(Note 1)	PD	150	mW
Thermal Resistance, Junction–to–Ambient	RΘJA	833	ºC/W
Junction and Storage temperature	TJ,Tstg	−55~+150	ºC

1.FR–5=1.0 x 0.75 x 0.062in

5. ELECTRICAL CHARACTERISTICS (Ta= 25°C)

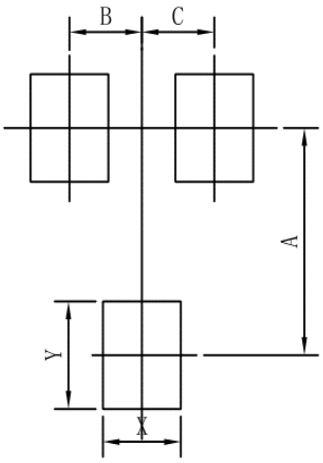
Characteristic	Symbol	Min.	Typ.	Max.	Unit
OFF CHARACTERISTICS					
Collector-Emitter Breakdown Voltage (IC = -10mA)	BVCEO	-45	-	-	V
Collector-Emitter Breakdown Voltage (IC = -10μA,VEB = 0)	BVCES	-50	-	-	
Collector-Base Breakdown Voltage (IC = -10μA)	BVCBO	-50	-	-	
Emitter-Base Breakdown Voltage (IE = -1μA)	BVEBO	-5	-	-	
Collector Cut-off Current (VCB = -30V) (VCB = -30 V, TA = 150°C)	ICBO	- -	- -	-15 -4	nA μA
Emitter Cutoff Current (VEB = -5 V, IC = 0)	IEBO	-	-	-100	nA
Collector-Emitter cutoff Current (VCE＝-45V, IB=0)	ICEO	-	-	-10	μA
ON CHARACTERISTICS					
DC Current Gain (IC = –2.0 mA, VCE = –5.0 V)	hFE	420	520	800	
Collector-Emitter saturation Voltage (IC = –10 mA, IB = –0.5 mA) (IC = –100 mA, IB = –5.0 mA)	VCE(sat)	- -	- -	-0.3 -0.65	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	-1.0 -1.2	V
Base–Emitter On Voltage (IC = –2.0 mA, VCE = –5.0 V) (IC = –10 mA, VCE = –5.0 V)	VBE(on)	-0.6 -	- -	-0.75 -0.82	V
SMALL–SIGNAL CHARACTERISTICS					
Current–Gain — Bandwidth Product (IC = –10 mA, VCE = –5.0 V, f = 100 MHz)	fT	100	-	-	MHz
Output Capacitance (VCB = –10 V, f = 1.0 MHz)	Cob	-	-	4.5	pF
Noise Figure (IC = –0.2 mA, VCE = –5.0 V, RS = 2.0 kΩ f = 1.0 kHz, BW = 200 Hz)	NF	-	-	10	dB

6.OUTLINE AND DIMENSIONS



SC70			
DIM	MIN	NOR	MAX
A	0.80	0.95	1.00
A1	0.00	0.05	0.10
A2		0.7 REF	
b	0.30	0.35	0.40
c	0.10	0.15	0.25
D	1.80	2.05	2.20
E	1.15	1.30	1.35
e	1.20	1.30	1.40
e1		0.65 BSC	
L	0.20	0.35	0.56
He	2.00	2.10	2.40
ALL Dimension in mm			

7.SOLDERING FOOTPRINT



SC70	
DIM	MIN
A	1.90
B	0.65
C	0.65
X	0.70
Y	0.90

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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