

RoHS Compliant Product  
A suffix of "-C" specifies halogen & lead-free

## FEATURES

- Two Transistors in One Package
- Reduces Number of Components and Board Space
- No Mutual Interference Between the Transistors

## MARKING

5Ft

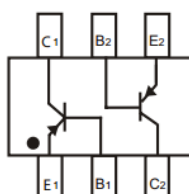
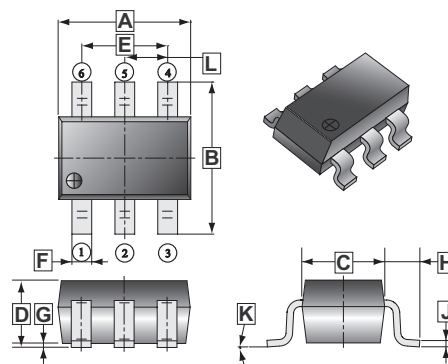
## PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-363	3K	7 inch

## ORDER INFORMATION

Part Number	Type
BCB856S	Lead (Pb)-free
BCB856S-C	Lead (Pb)-free and Halogen-free

## SOT-363



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.80	2.20	G	0.100 REF.	
B	1.80	2.45	H	0.525 REF.	
C	1.15	1.35	J	0.08	0.25
D	0.80	1.10	K	8°	
E	1.10	1.50	L	0.650 TYP.	
F	0.10	0.35			

## ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V <sub>(BR)CBO</sub>	-80	V
Collector-Emitter Voltage	V <sub>(BR)CEO</sub>	-65	V
Emitter-Base Voltage	V <sub>(BR)EBO</sub>	-5	V
Continuous Collector Current	I <sub>C</sub>	-0.1	A
Collector Power Dissipation	P <sub>C</sub>	200	mW
Thermal Resistance from Junction-Ambient	R <sub>θJA</sub>	625	°C/W
Junction & Storage Temperature	T <sub>J</sub> , T <sub>STG</sub>	150, -55~150	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

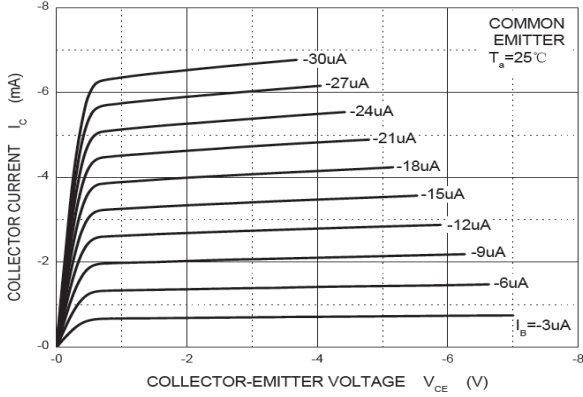
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Condition
Collector-Base Breakdown Voltage	V <sub>(BR)CBO</sub>	-80	-	-	V	I <sub>C</sub> = -10μA, I <sub>E</sub> =0
Collector-Emitter Breakdown Voltage	V <sub>(BR)CEO</sub>	-65	-	-		I <sub>C</sub> = -10mA, I <sub>B</sub> =0
Emitter-Base Breakdown Voltage	V <sub>(BR)EBO</sub>	-5	-	-		I <sub>E</sub> = -10μA, I <sub>C</sub> =0
Collector Cut-Off Current	I <sub>CB0</sub>	-	-	-15	nA	V <sub>CB</sub> = -30V, I <sub>E</sub> =0
Emitter Cut-Off Current	I <sub>EBO</sub>	-	-	-100	nA	V <sub>EB</sub> = -5V, I <sub>C</sub> =0
DC Current Gain	h <sub>FE</sub>	110	-	-		V <sub>CE</sub> = -5V, I <sub>C</sub> = -2mA
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	-	-	-0.1	V	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.5mA
	V <sub>CE(sat)</sub> <sup>1</sup>	-	-	-0.3		I <sub>C</sub> = -100mA, I <sub>B</sub> = -5mA
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	-	0.7	-	V	I <sub>C</sub> = -10mA, I <sub>B</sub> = -0.5mA
Transition Frequency	f <sub>T</sub>	-	100	-	MHz	V <sub>CE</sub> = -5V, I <sub>C</sub> = -10mA, f=100MHz
Collector Output Capacitance	C <sub>ob</sub>	-	2.5	-	pF	V <sub>CB</sub> = -10V, I <sub>E</sub> =0, f=1MHz

Notes:

1. Pulse test: Pulse width ≤ 350μs, δ ≤ 2%.

**CHARACTERISTICS CURVES**

Static Characteristic



$h_{FE}$  —  $I_c$

