

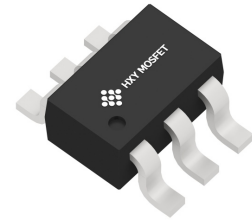


Features

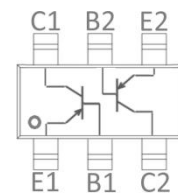
Two transistors in one package
Reduces number of components and board space
No mutual interference between the transistors

Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
BC856BDW1T1G	SOT-363	5Ft	3000



Pin 1
SOT-363



Maximum Ratings (Ta=25°C unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector- Base Voltage	-80	V
V_{CEO}	Collector-Emitter Voltage	-65	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-0.1	A
P_C	Collector Power Dissipation	0.2	W
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	625	°C/W
T_J, T_{STG}	Operation Junction and Storage Temperature Range	-55~+150	°C

Electrcal Charcteristics (Ta=25°C unless otherwise noted)

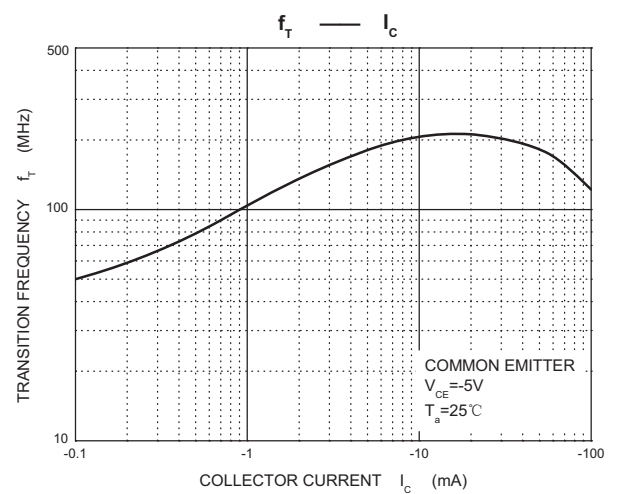
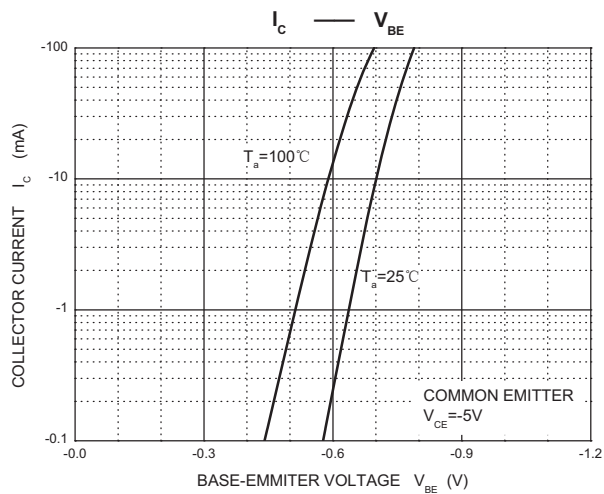
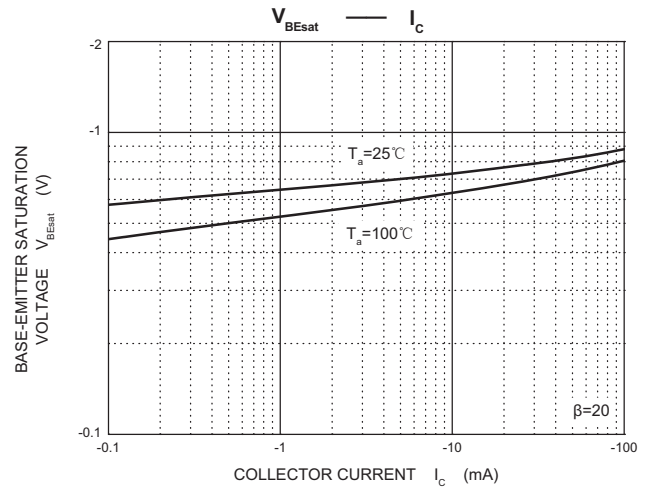
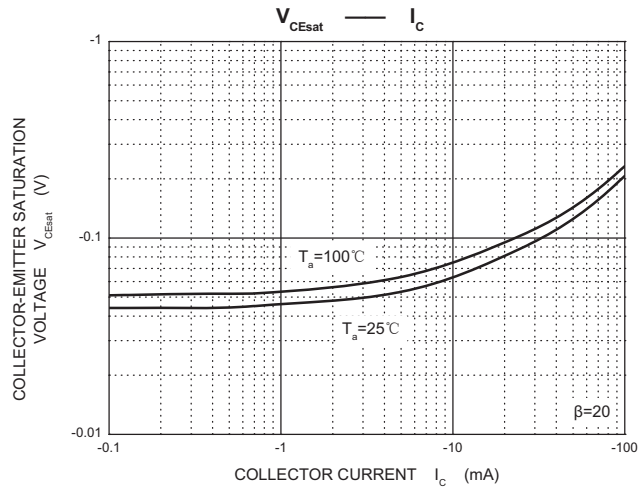
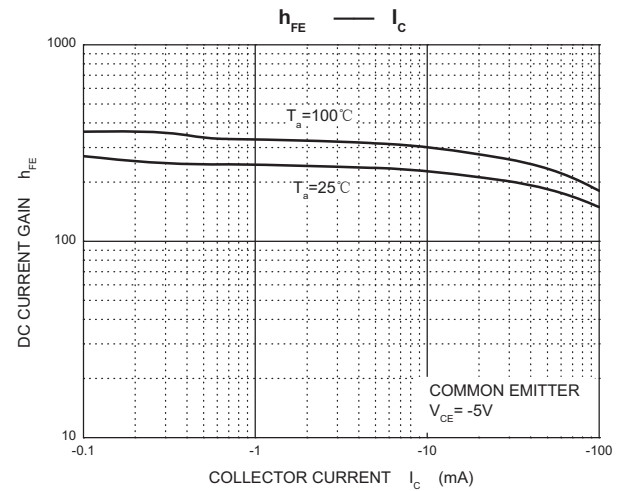
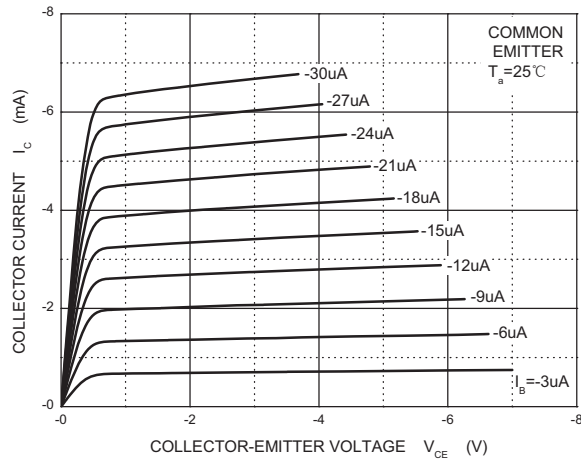
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -10\mu A, I_E = 0$	-80			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -10mA, I_B = 0$	-65			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -30V, I_E = 0$			-15	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -5V, I_C = 0$			-100	nA
DC current gain	h_{FE}	$V_{CE} = -5V, I_C = -2mA$	200		450	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -10mA, I_B = -0.5mA$			-0.1	V
		$I_C = -100mA, I_B = -5mA^*$			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -10mA, I_B = -0.5mA$		0.7		V
Output Capacitance	C_{obo}	$V_{CB} = -10V, f = 1MHz, I_E = 0$			2.5	pF
Current Gain-Bandwidth Product	f_T	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$	100			MHz

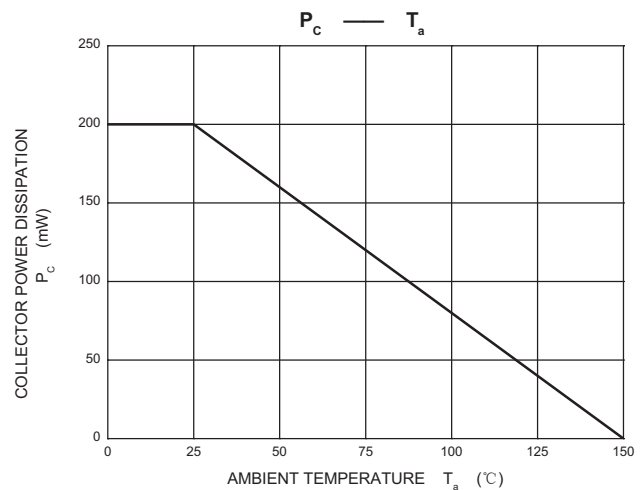
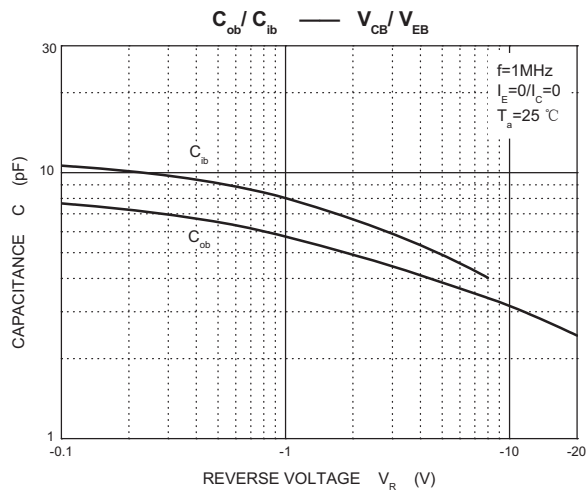
*pulse test: $PW \leq 350\mu S, \delta \leq 2\%$.



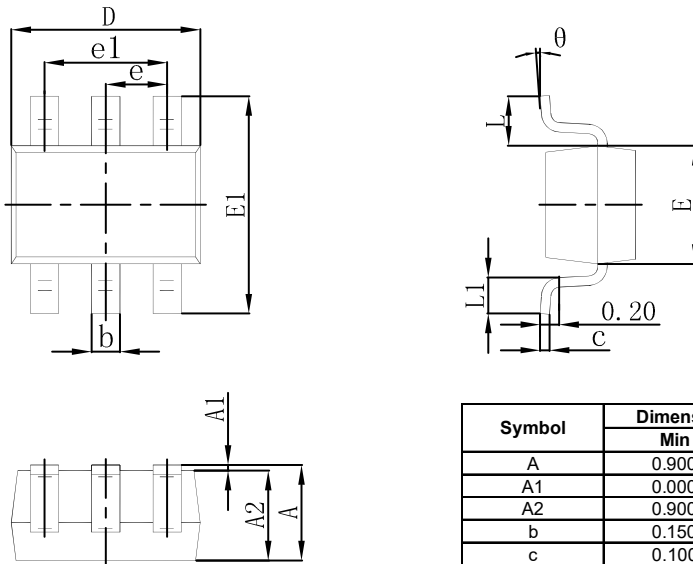
Typical Characteristics

Static Characteristic



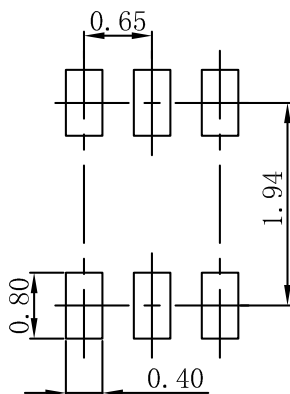


SOT-363 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
theta	0°	8°	0°	8°

SOT-363 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.



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