

Features

- Halogen Free. "Green" Device (Note 1)
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings @ 25°C Unless Otherwise Specified

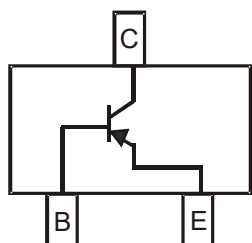
Parameter	Symbol	Rating	Unit
Collector-Base Voltage	V_{CBO}	-80	V
Collector-Emitter Voltage	V_{CEO}	-65	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Power Dissipation	P_D	150	mW

Thermal characteristics

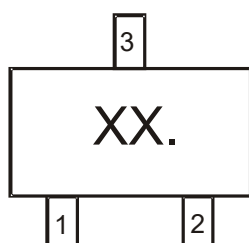
Parameter	Symbol	Rating	Unit
Junction Temperature Range	T_j	-55~+150	°C
Storage Temperature Range	T_{stg}	-55~+150	°C
Thermal Resistance from Junction to Ambient	$R_{th(J-A)}$	833	°C/W

Note: 1. Halogen free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

Internal Structure



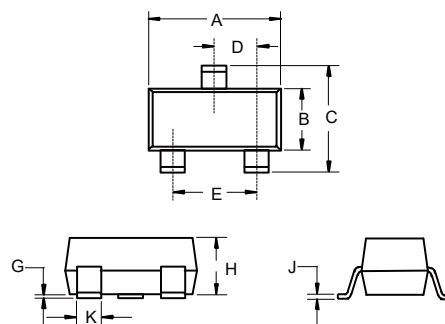
Marking Code



Part NO.	BC856AT	BC856BT
Marking	3A	3B

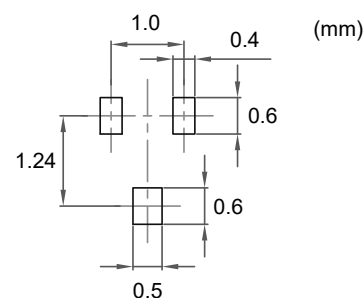
PNP Plastic Encapsulate Transistors

SOT-523



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.059	0.067	1.50	1.70	
B	0.030	0.033	0.75	0.85	
C	0.057	0.069	1.45	1.75	
D	0.020		0.50		TYP.
E	0.035	0.043	0.90	1.10	
G	0.000	0.004	0.00	0.10	
H	0.024	0.031	0.60	0.80	
J	0.004	0.008	0.10	0.20	
K	0.006	0.014	0.15	0.35	

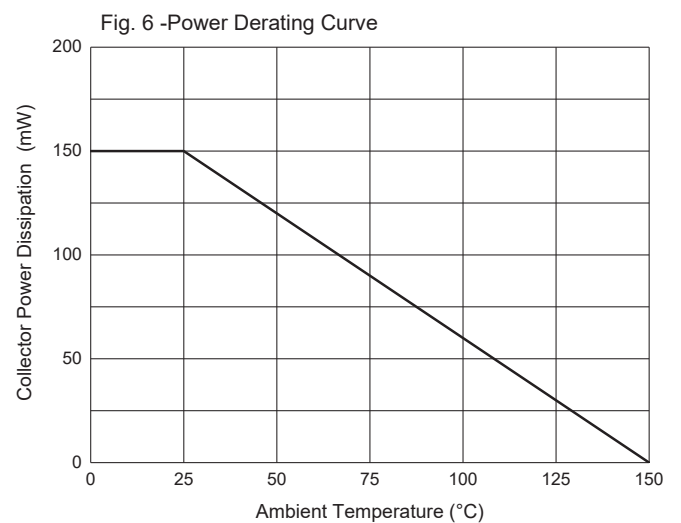
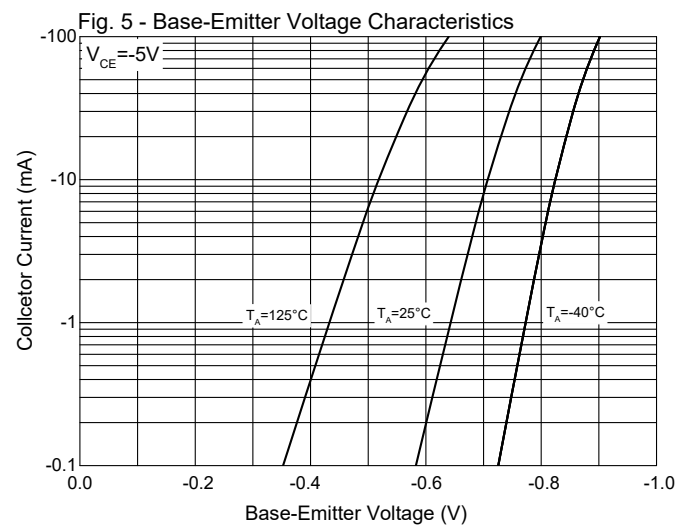
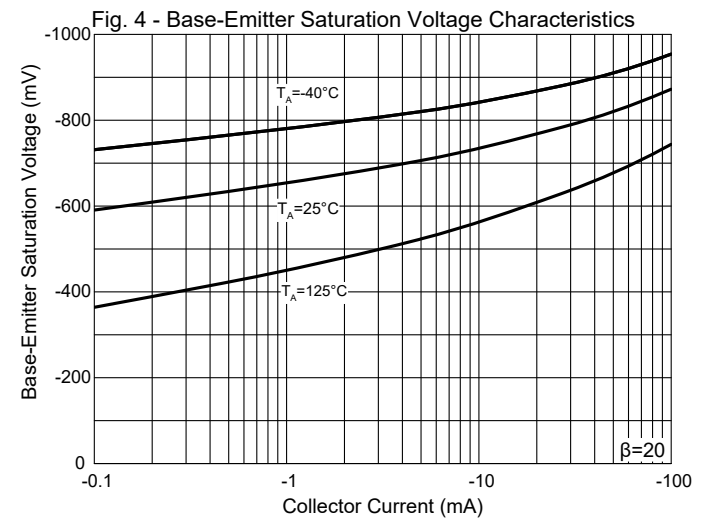
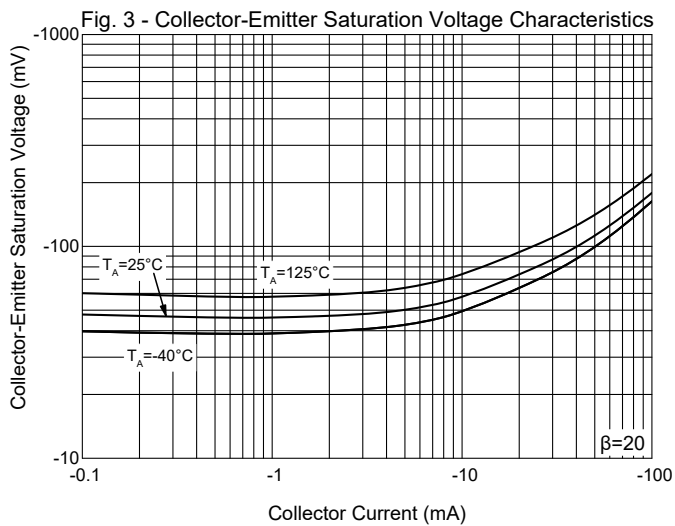
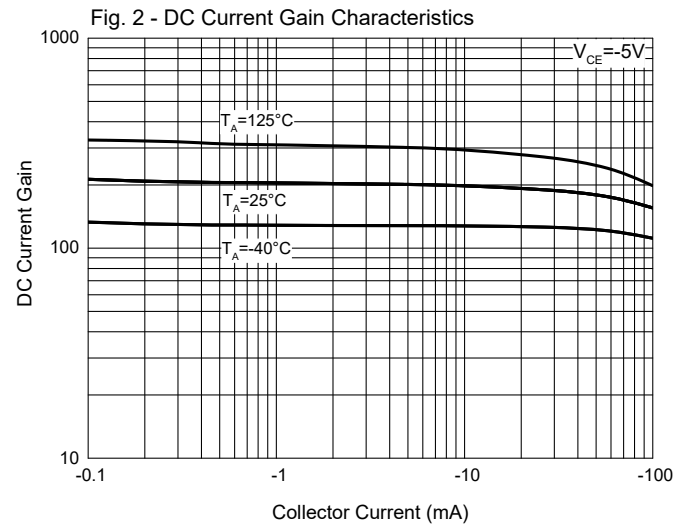
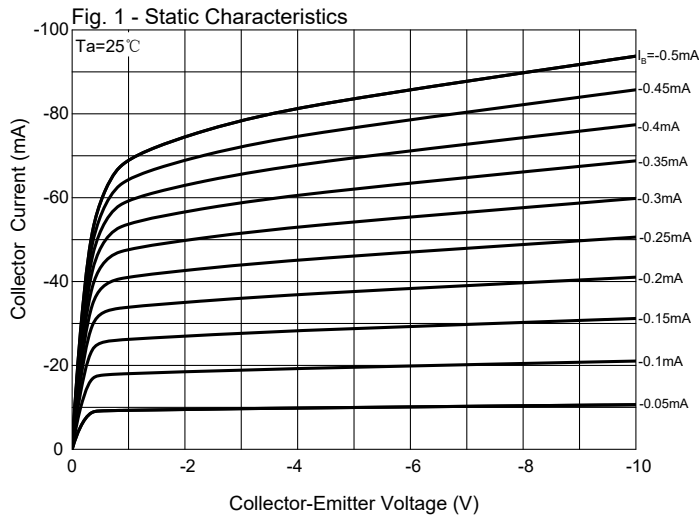
Suggested Solder Pad Layout



Electrical Characteristics @ 25°C Unless Otherwise Specified

Parameter		Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage		$V_{(BR)CBO}$	-80			V	$I_C = -10\mu A, I_E = 0$
Collector-Emitter Breakdown Voltage		$V_{(BR)CEO}$	-65			V	$I_C = -10mA, I_B = 0$
Emitter-Base Breakdown Voltage		$V_{(BR)EBO}$	-5			V	$I_E = -1\mu A, I_C = 0$
Collector-Base Cutoff Current		I_{CBO}			-15	nA	$V_{CB} = -30V, I_E = 0$
Emitter-base Cutoff Current		I_{EBO}			-100	nA	$V_{EB} = -5V, I_C = 0$
DC Current Gain	BC856AT	h_{FE}	125		250		$V_{CE} = -5V, I_C = -2mA$
	BC856BT		220		475		
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$			-300	mV	$I_C = -10mA, I_B = -0.5mA$
					-650	mV	$I_C = -100mA, I_B = -5mA$
Base-Emitter Saturation Voltage		$V_{BE(sat)}$		-700		mV	$I_C = -10mA, I_B = -0.5mA$
				-850		mV	$I_C = -100mA, I_B = -5mA$
Base-Emitter Voltage		V_{BE}	-600		-750	mV	$V_{CE} = -5V, I_C = -2mA$
					-820	mV	$V_{CE} = -5V, I_C = -10mA$
Current Gain-Bandwidth Product		f_T		200		MHz	$V_{CE} = -5V, I_C = -10mA, f = 100MHz$
Collector Capacitance		C_{ob}		2.5		pF	$V_{CB} = -10V, f = 1MHz$

Curve Characteristics



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

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