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)

PNP Plastic-Encapsulate Transistors

Maximum Ratings @ 25°C Unless Otherwise Specified

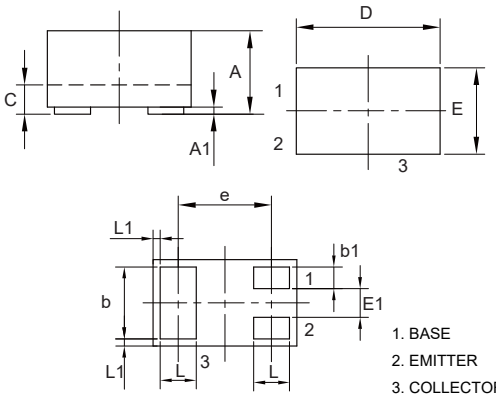
- Operating Junction Temperature Range: -55℃ to +150℃
- Storage Temperature Range: -55℃ to +150℃
- Maximum Thermal Resistance:833℃/W Junction to Ambient

Parameter	Symbol	Rating	Unit
Collector-Base Voltage BC856A-BC856B BC857A-BC857C BC858A-BC858C	V_{CBO}	 -80 -50 -30	V
Collector-Emitter Voltage BC856A-BC856B BC857A-BC857C BC858A-BC858C	V_{CEO}	 -65 -45 -30	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-100	mA
Collector Power Dissipation	P_C	150	mW

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

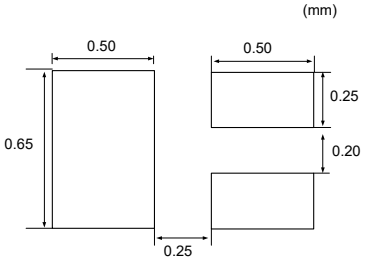
Marking:
BC856A:3A; BC856B:3B;
BC857A:3E; BC857B:3F; BC857C:3G;
BC858A:3J; BC858B:3K; BC858C:3L;

DFN1006-3



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.018	0.022	0.45	0.55	
A1	0.000	0.002	0.00	0.05	
b	0.018	0.022	0.45	0.55	
b1	0.004	0.008	0.10	0.20	
c	0.005	0.007	0.12	0.18	
D	0.037	0.042	0.95	1.075	
E	0.022	0.026	0.55	0.675	
E1	0.006	0.010	0.15	0.25	
e	0.026		0.65		TYP.
L	0.008	0.012	0.20	0.30	
L1	0.0002		0.05		TYP.

Suggested Solder Pad Layout



Electrical Characteristics @ T_A=25°C Unless Otherwise Specified

Parameter	Symbol	Min	Typ	Max	Units	Conditions
Collector-Base Breakdown Voltage						
BC856A-BC856B	$V_{(BR)CBO}$	-80			V	I_C=-10μA, I_E=0
BC857A-BC857C		-50				
BC858A-BC858C		-30				
Collector-Emitter Breakdown Voltage						
BC856A-BC856B	$V_{(BR)CEO}$	-65			V	I_C=-10mA, I_B=0
BC857A-BC857C		-45				
BC848A-BC848C		-30				
Emitter-Base Breakdown Voltage						
BC856A-BC856B	$V_{(BR)EBO}$	-5			V	I_E=-1μA, I_C=0
BC857A-BC857C		-5				
BC858A-BC858C		-5				
Collector Cut-off Current	I_{CBO}			-15	nA	V_{CB}=-30V, I_E=0
Emitter Cutoff Current	I_{EBO}			-100	nA	V_{EB}=-5V, I_C=0
Emitter Cutoff Current	I_{CEO}			-1	mA	V_{CE}=-30V, I_B=0
DC Current Gain						
BC856A/BC857A/BC858A	h_{FE}	110		220		V_{CE}=-5V, I_C=-2mA
BC856B/BC857B/BC858B		200		450		
BC857C/BC858C		420		800		
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$			-0.3	V	I_C=-10mA, I_B=-0.5mA
				-0.65		I_C=-100mA, I_B=-5mA
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-0.7		V	I_C=-10mA, I_B=-0.5mA
			-0.85			I_C=-100mA, I_B=-5mA
Base-Emitter On Voltage	$V_{BE(on)}$	-0.6	-0.65	-0.75	V	V_{CE}=-5V, I_C=-2mA
				-0.82		V_{CE}=-5V, I_C=-10mA
Transition Frequency	f_T	100			MHz	V_{CE}=-5V, I_C=-10mA, f=100MHz

Curve Characteristics

Fig. 1 - Static Characteristics

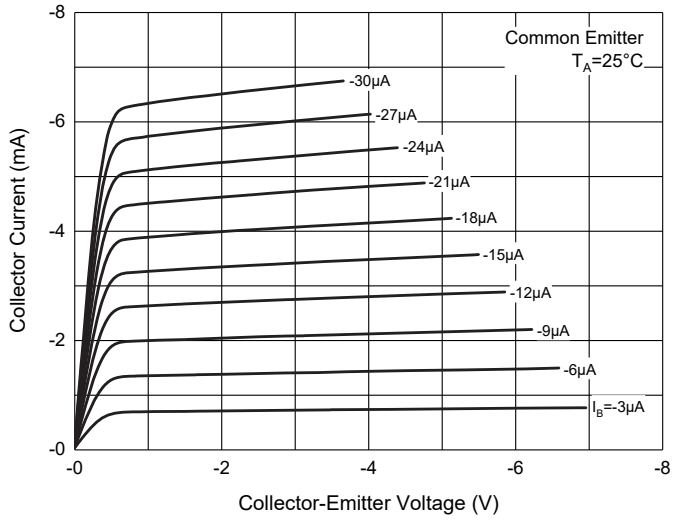


Fig. 2 - DC Current Gain Characteristics

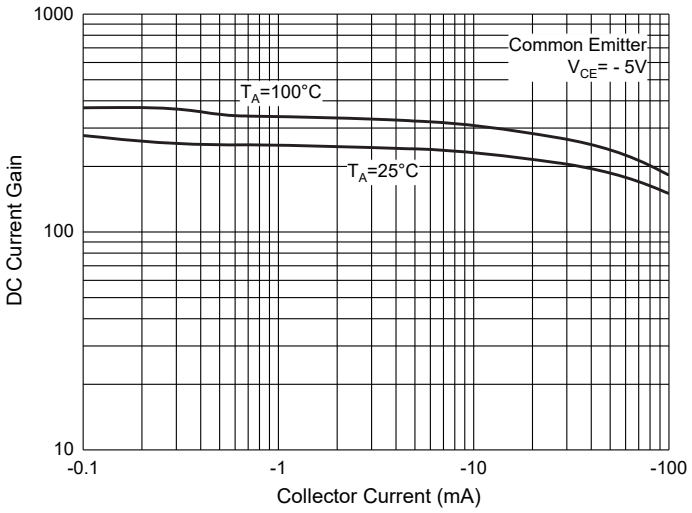


Fig. 3 - Collector-Emitter Saturation Voltage Characteristics

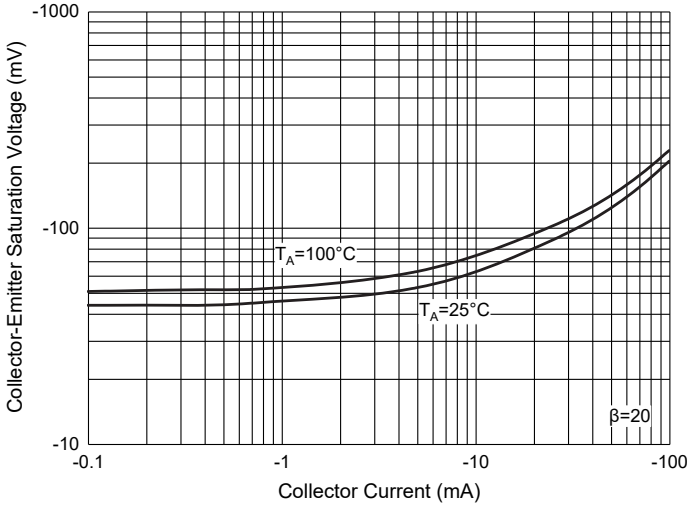


Fig. 4 - Base-Emitter Saturation Voltage Characteristics

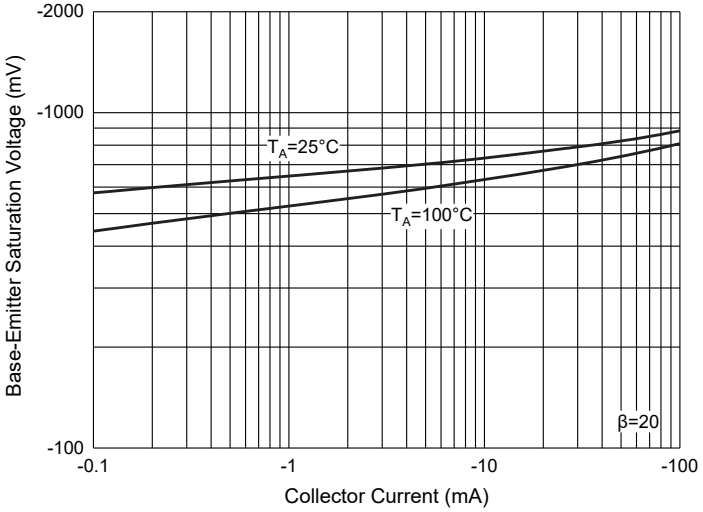


Fig. 5 - Base-Emitter Voltage Characteristics

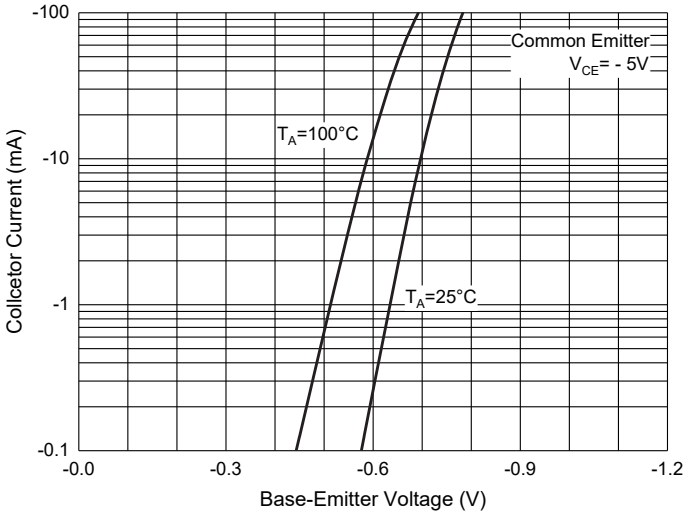
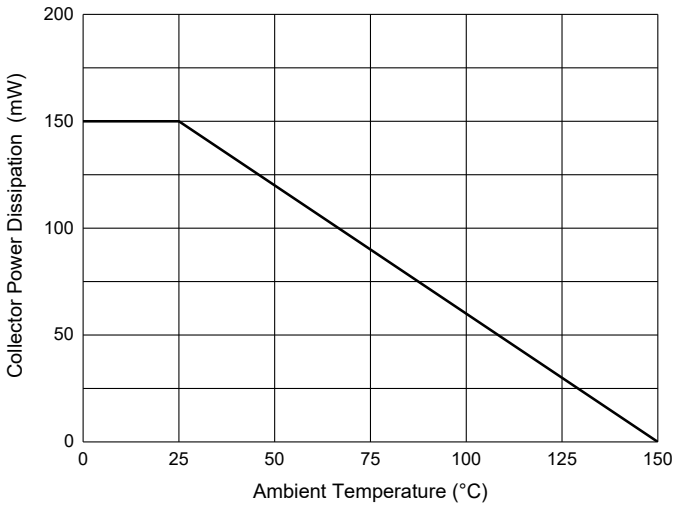


Fig. 6 - Collector Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 10Kpcs/Reel