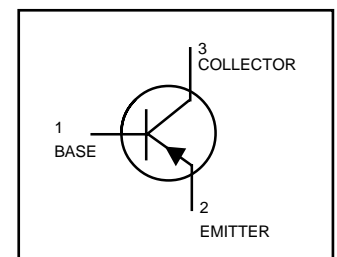
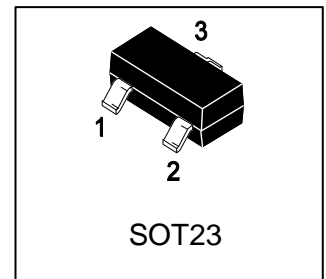
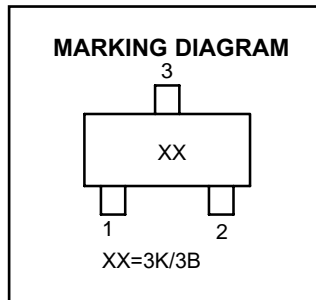


General Purpose Transistors PNP Silicon

FEATURES

- For Switching and AF Amplifier Applications.
- AEC-Q101 qualified (Automotive grade with suffix " Q".)



Absolute Maximum Ratings

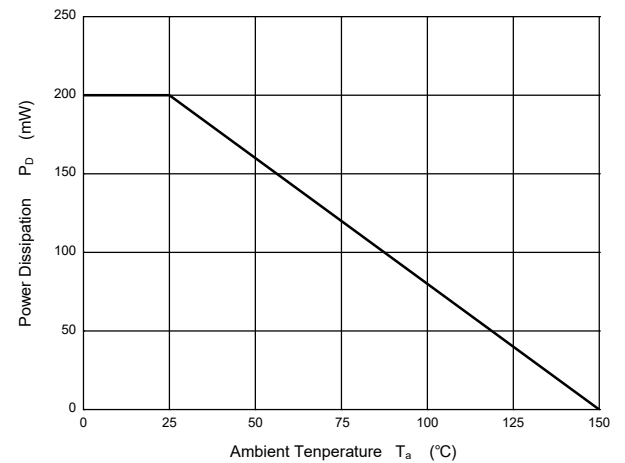
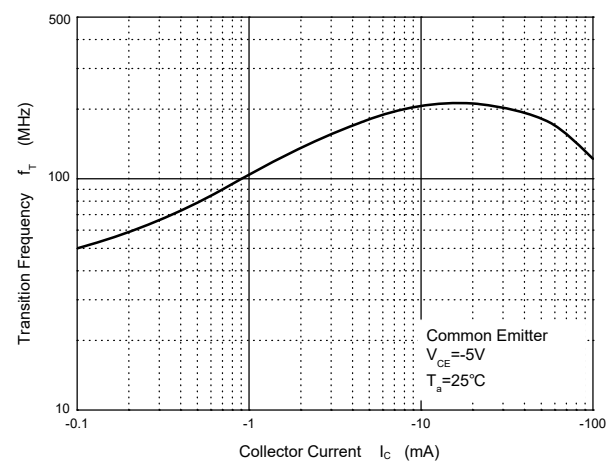
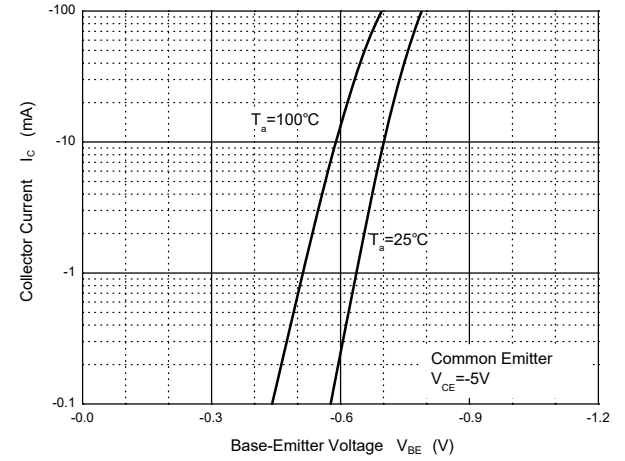
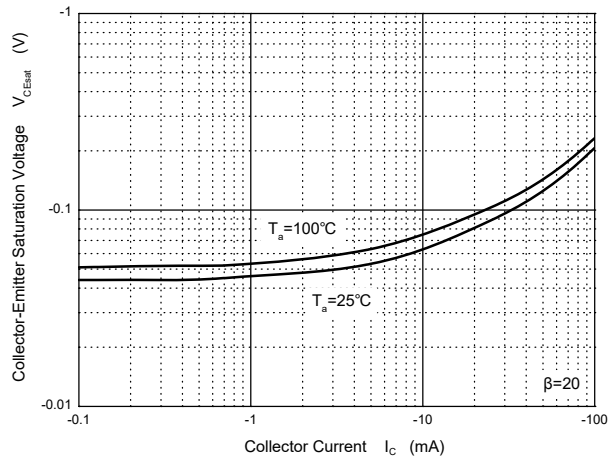
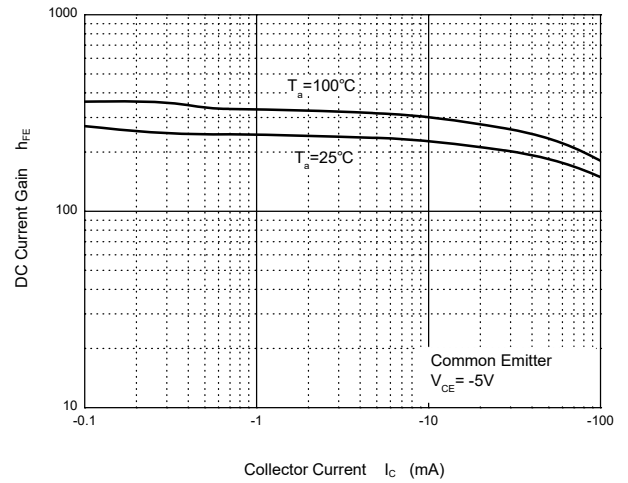
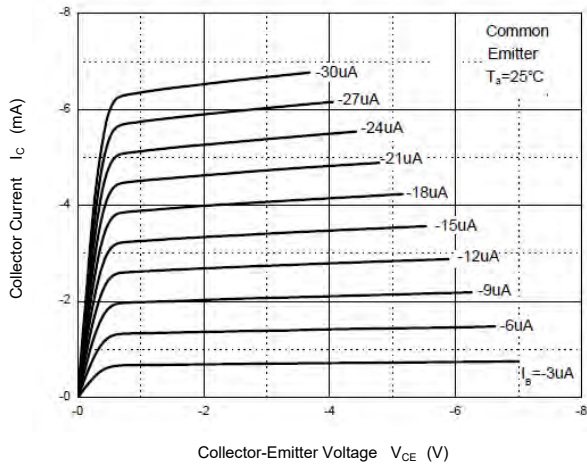
Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Collector Base Voltage	BC856	80	V
	BC857 BC860	50	
	BC858 BC859	30	
Collector Emitter Voltage	BC856	65	V
	BC857 BC860	45	
	BC858 BC859	30	
Emitter Base Voltage		5	V
Collector Current	$-I_C$	100	mA
Peak Collector Current	$-I_{CM}$	200	mA
Maximum Power Dissipation	P_D	200	mW
Junction Temperature	T_J	150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

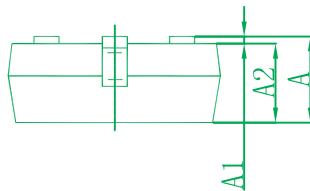
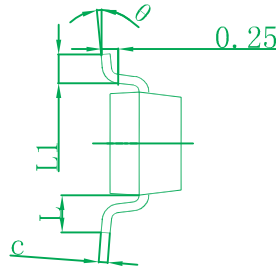
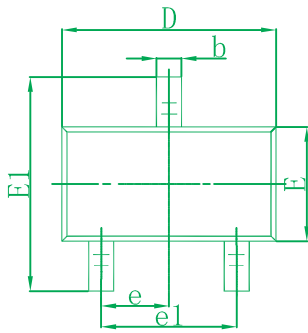
Electrical Characteristics (T_A=25°C)

Parameter	Symbol	Min.	Max.	Unit	
DC Current Gain at V _{CE} = -5 V, I _C = -2 mA	Gain Group				
	A	125	250	--	
	B	220	475		
	C	420	800		
Collector Base Cutoff Current at V _{CB} = -30V	-I _{CBO}	--	15	nA	
Collector Base Breakdown Voltage at I _C = -10 μA	BC856 BC857 BC860 BC858 BC859	-V _{(BR)CBO}	80 50 30	-- -- --	V
Collector Emitter Breakdown Voltage at I _C = -10 mA	BC856 BC857 BC860 BC858 BC859	-V _{(BR)CEO}	65 45 30	-- -- --	V
Emitter Base Breakdown Voltage at I _E = -1 μA		-V _{(BR)EBO}	5	--	V
Collector Emitter Saturation Voltage at I _C = -10 mA, I _B = -0.5 mA at I _C = -100 mA, I _B = -5 mA		-V _{CE(sat)}	-- --	0.3 0.65	V
Base Emitter On Voltage at V _{CE} = -5 V, I _C = -2 mA at V _{CE} = -5 V, I _C = -10 mA		-V _{BE(on)}	0.6 --	0.75 0.82	V
Transition Frequency at V _{CE} = -5 V, I _C = -10 mA, f = 100 MHz	F _T	100	--	MHz	
Output Capacitance at V _{CB} = -10 V, f = 1 MHz	C _{ob}	--	6	pF	

Typical Characteristic Curves

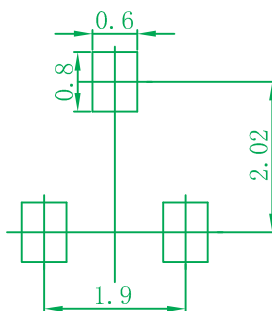


SOT-23 Package Information



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.150	0.035	0.045
b	0.300	0.500	0.012	0.020
c	0.080	0.150	0.003	0.006
D	2.800	3.050	0.110	0.120
E	1.200	1.400	0.047	0.055
E1	2.250	2.550	0.089	0.100
e	0.950 TYP		0.037 TYP	
e1	1.800	2.000	0.071	0.079
L	0.550 REF		0.022 REF	
L1	0.300	0.500	0.012	0.020
θ	0°	8°	0°	8°

SOT-23 Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Ordering information

Device	Package	Shipping
BC85XX	SOT-23	3000/Tape&Reel