



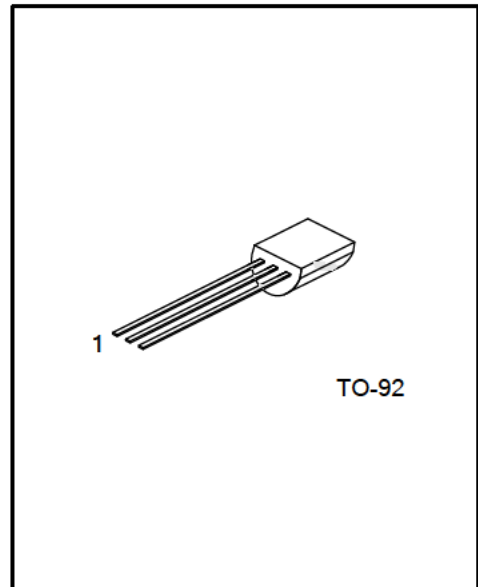
BC556/557/558

PNP SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

FEATURES

* High Voltage: **BC556**, $V_{CE0}=-65V$



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BC556L-x-T92-B	BC556G-x-T92-B	TO-92	C	B	E	Tape Box
BC556L-x-T92-K	BC556G-x-T92-K	TO-92	C	B	E	Bulk
BC557L-x-T92-B	BC557G-x-T92-B	TO-92	C	B	E	Tape Box
BC557L-x-T92-K	BC557G-x-T92-K	TO-92	C	B	E	Bulk
BC558L-x-T92-B	BC558G-x-T92-B	TO-92	C	B	E	Tape Box
BC558L-x-T92-K	BC558G-x-T92-K	TO-92	C	B	E	Bulk

Note: Pin Assignment: C: Collector B: Base E: Emitter

<p>BC556L-x-T92-B</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Green Package</p>	<p>(1) B: Tape Box, K: Bulk (2) T92: TO-92 (3) refer to CLASSIFICATION OF h_{FE} (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING

BC556	BC557	BC558

BC556/557/558

PNP SILICON TRANSISTOR

■ ABSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT	
Collector-Base Voltage	V _{CBO}	BC556	-80	V
		BC557	-50	V
		BC558	-30	V
Collector-Emitter Voltage	V _{CEO}	BC556	-65	V
		BC557	-45	V
		BC558	-30	V
Emitter-Base Voltage	V _{EBO}	-5	V	
Collector Current (DC)	I _C	-100	mA	
Power Collector Dissipation	P _C	625	mW	
Linear Derating Factor above (T _A =25°C)		5	mW/°C	
Junction Temperature	T _J	150	°C	
Storage Temperature	T _{STG}	-55~+150	°C	

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ _{JA}	200	°C/W
Junction to Case	θ _{JC}	83.3	°C/W

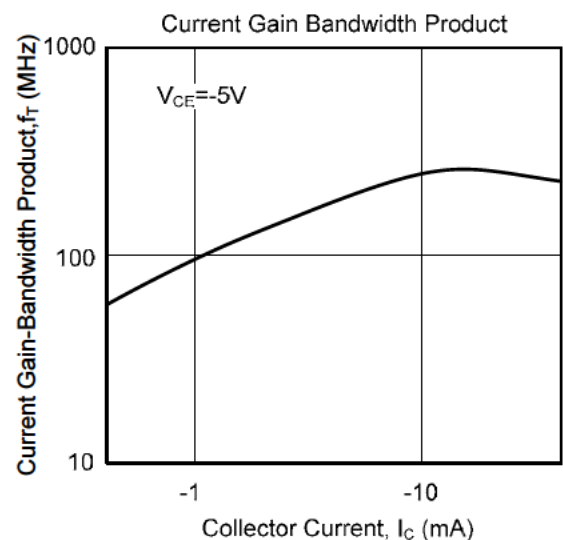
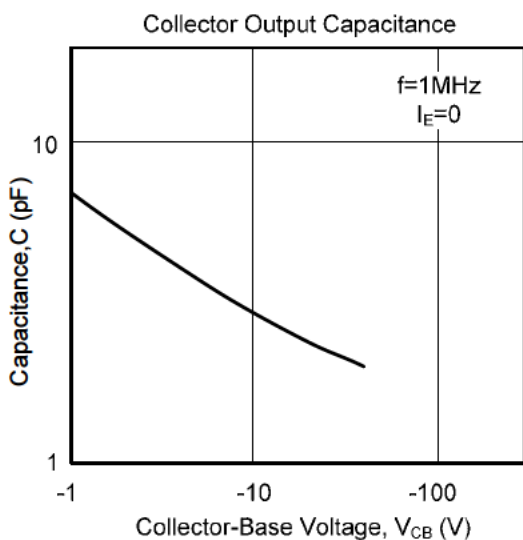
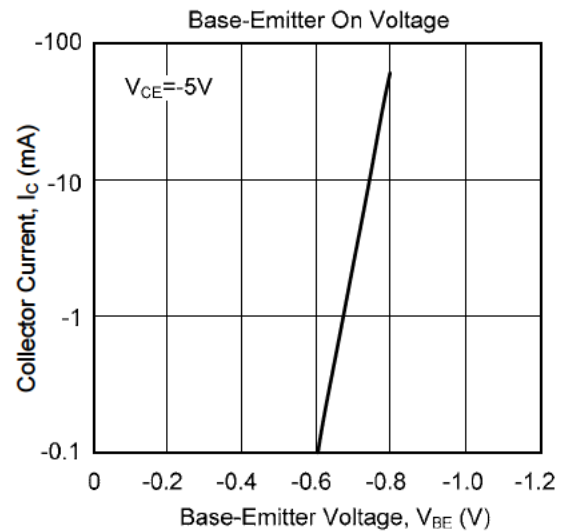
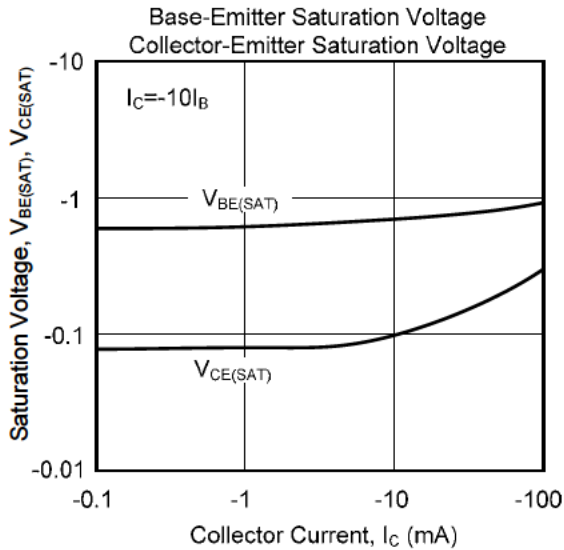
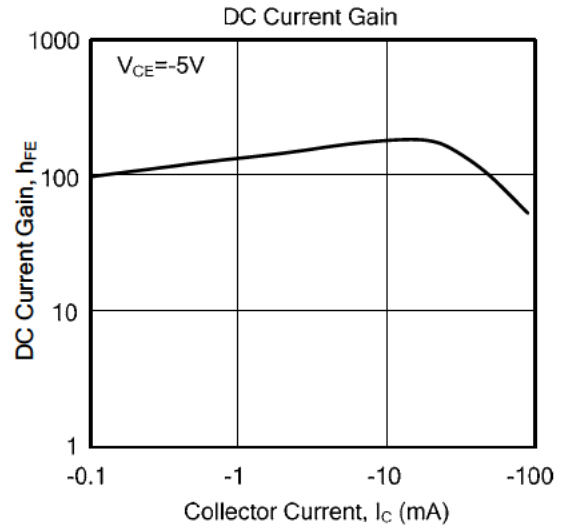
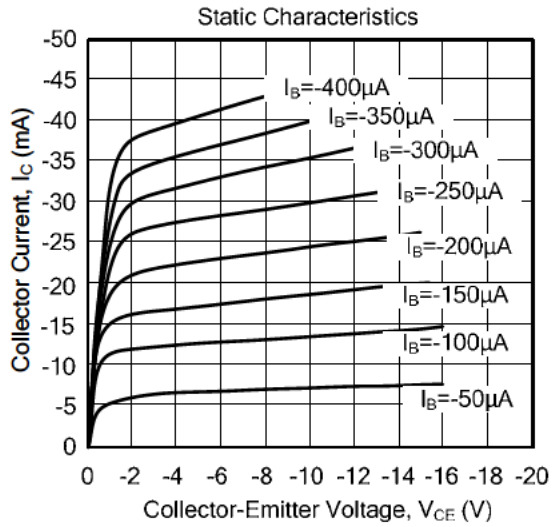
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C = -10mA, I _B = 0	BC556	-65		V
			BC557	-45		V
			BC558	-30		V
Collector-Base Breakdown Voltage	BV _{CBO}	I _C = -100μA	BC556	-80		V
			BC557	-50		V
			BC558	-30		V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E = -10μA, I _C = 0	-5.0		V	
Collector Cut-Off Current	I _{CBO}	I _E = 0, V _{CB} = -30 V			-15	nA
DC Current Gain	h _{FE}	V _{CE} = -5V, I _C = 2mA	110		800	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C = -10mA, I _B = -0.5mA		-90	-300	mV
		I _C = -100mA, I _B = -5mA		-250	-650	mV
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C = -10mA, I _B = -0.5mA		-700		mV
		I _C = -100mA, I _B = -5mA		-900		mV
Base-Emitter Turn-On Voltage	V _{BE(ON)}	V _{CE} = -5 V, I _C = -2mA	-600	-660	-750	mV
		V _{CE} = -5 V, I _C = -10mA			-800	mV
Current Gain Bandwidth Product	f _T	V _{CE} = -5V, I _C = -10mA, f = 10MHz		150		MHz
Output Capacitance	C _{OB}	V _{CB} = -10V, I _E = 0, f = 1MHz			6	pF
Noise Figure	NF	V _{CE} = -5V, I _C = -200μA f = 1KHz, R _G = 2KΩ		2	10	dB

■ CLASSIFICATION OF h_{FE}

RANK	A	B	C
h _{FE}	110 - 220	200 - 450	420 - 800

■ TYPICAL CHARACTERISTICS



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