



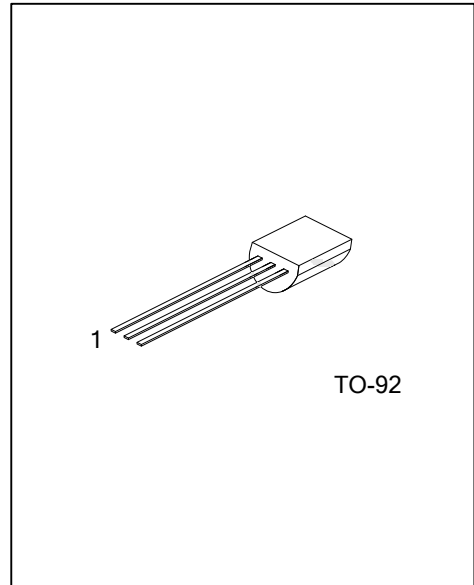
BC327/328

PNP EPITAXIAL SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

FEATURES

- * Suitable for AF-Driver stages and low power output stages
- * Complement to UTC **BC337/338**



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
BC327L-xx-T92-B	BC327G-xx-T92-B	TO-92	C	B	E	Tape Box
BC327L-xx-T92-K	BC327G-xx-T92-K	TO-92	C	B	E	Bulk
BC328L-xx-T92-B	BC328G-xx-T92-B	TO-92	C	B	E	Tape Box
BC328L-xx-T92-K	BC328G-xx-T92-K	TO-92	C	B	E	Bulk

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

<p>BC327G-xx-T92-B</p>	<p>(1) B: Tape Box, K: Bulk (2) T92: TO-92 (3) xx: refer to CLASSIFICATION OF h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING

BC327	BC328

■ **ABSOLUTE MAXIMUM RATING** ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-emitter voltage	BC327	-50	V
	BC328	-30	V
Collector-emitter voltage	BC327	-45	V
	BC328	-25	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current (DC)	I_C	-800	mA
Peak Base Current	I_{BM}	-200	mA
Collector dissipation	P_C	625	mW
Junction Temperature	T_J	+125	$^\circ\text{C}$
Operating Temperature	T_{OPR}	-20 ~ +85	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

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.

■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage	BC327	$I_C=-10\text{mA}, I_B=0$	-45			V
	BC328		-25			V
Collector-emitter breakdown voltage	BC327	$I_C=-0.1\text{mA}, V_{BE}=0$	-50			V
	BC328		-30			V
Emitter-base breakdown voltage	BV_{EBO}	$I_E=-10\text{mA}, I_C=0$	-5			V
Collector Cut-off Current	BC327	$V_{CE}=-45\text{V}, I_B=0$		-2	-100	V
	BC328		$V_{CE}=-25\text{V}, I_B=0$		-2	-100
DC current gain		h_{FE1}	$V_{CE}=-1\text{V}, I_C=-100\text{mA}$	100		630
		h_{FE2}	$V_{CE}=-1\text{V}, I_C=-300\text{mA}$	40		
Collector-emitter saturation voltage	$V_{CE(SAT)}$	$I_C=-500\text{mA}, I_B=-50\text{mA}$			-0.7	V
Base-emitter on voltage	$V_{BE(ON)}$	$V_{CE}=-1\text{V}, I_C=-300\text{mA}$			-1.2	V
Current gain bandwidth product	f_T	$V_{CE}=-5\text{V}, I_C=-10\text{mA}, f=20\text{MHz}$		100		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10\text{V}, I_E=0, f=1\text{MHz}$		12		pF

■ **CLASSIFICATION OF h_{FE}**

RANK	16	25	40
h_{FE1}	100-250	160-400	250-630
h_{FE2}	60~	100~	170~

■ TYPICAL CHARACTERISTICS

Figure 1. Static Characteristic

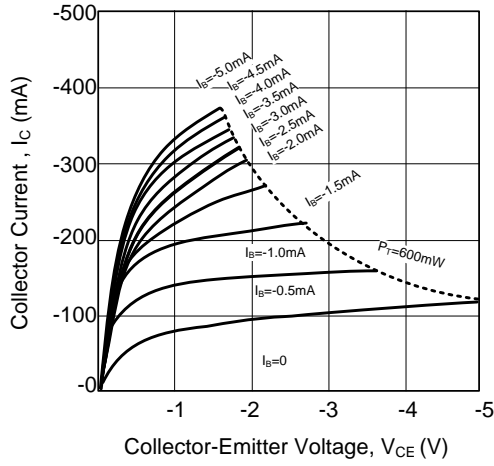


Figure 2. Static Characteristic

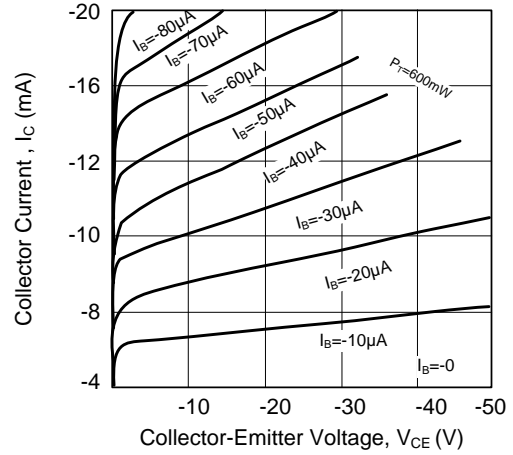


Figure 3. DC Current Gain

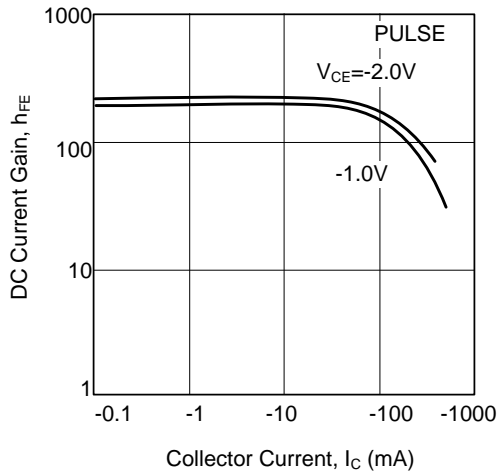


Figure 4. Base-Emitter Saturation Voltage vs. Collector-Emitter Saturation Voltage

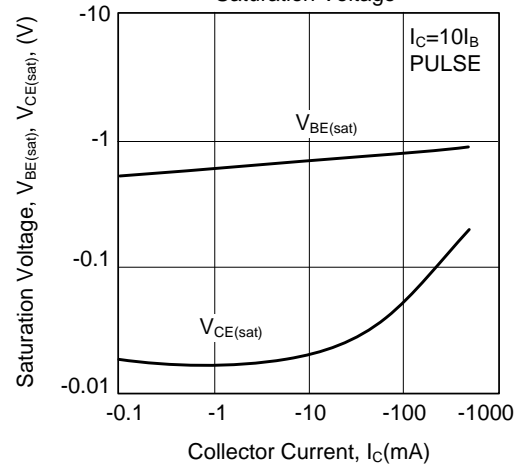


Figure 5. Base-Emitter On Voltage

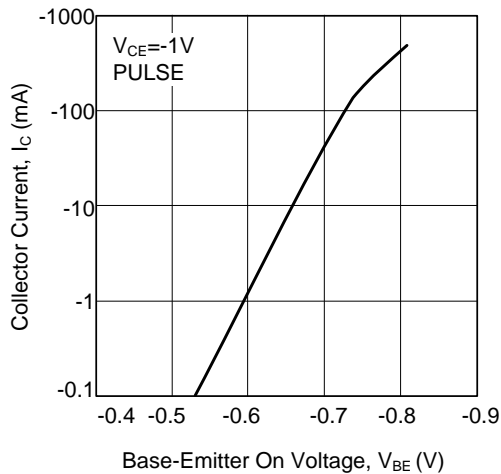
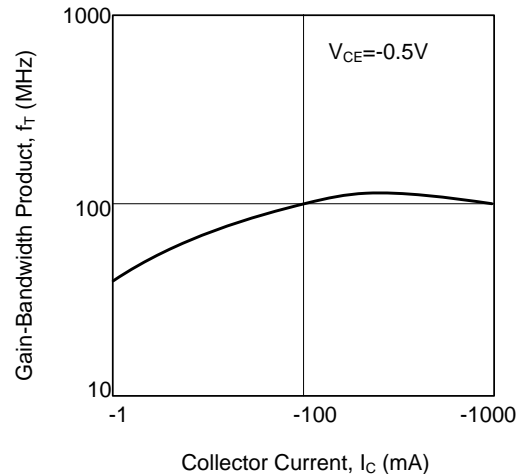


Figure 6. Gain Bandwidth Product



■ TYPICAL CHARACTERISTICS (Cont.)

Figure 5. Base-Emitter On Voltage

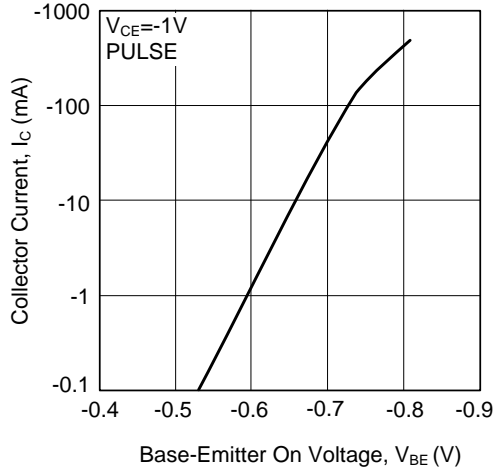


Figure 6. Gain Bandwidth Product

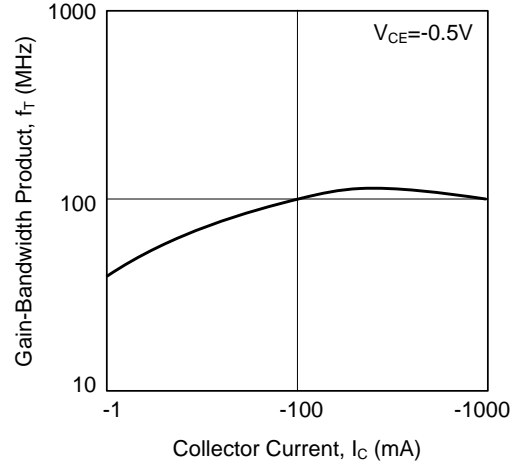
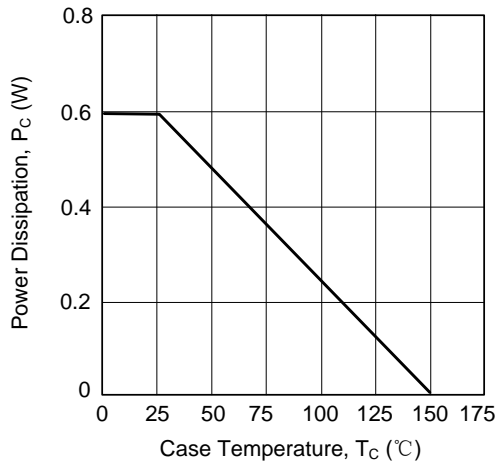


Figure 9. Power Derating



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