



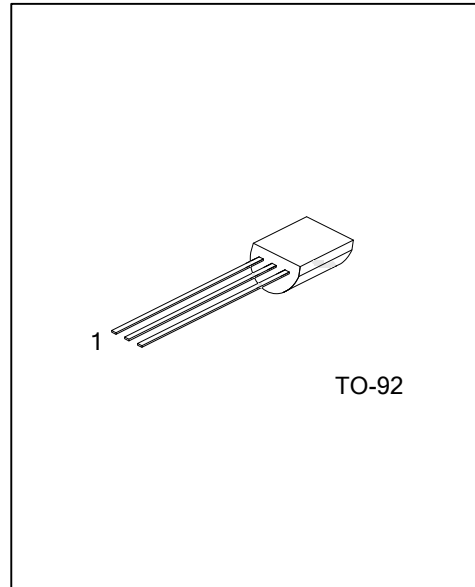
**BC327/328**

**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>BC327L-xx-T92-B</p>	<p>(1) B: Tape Box, K: Bulk          (2) T92: TO-92          (3) xx: refer to CLASSIFICATION OF <math>h_{FE}</math>          (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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■ **MARKING**

BC327	BC328

# BC327/328

## PNP EPITAXIAL SILICON TRANSISTOR

### ■ 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
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	V
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

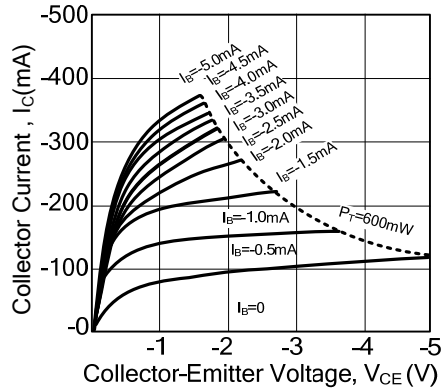


Figure 2. Static Characteristic

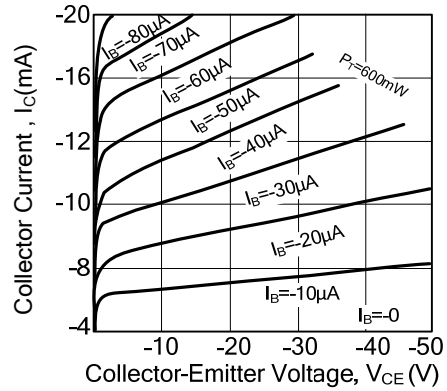


Figure 3. DC Current Gain

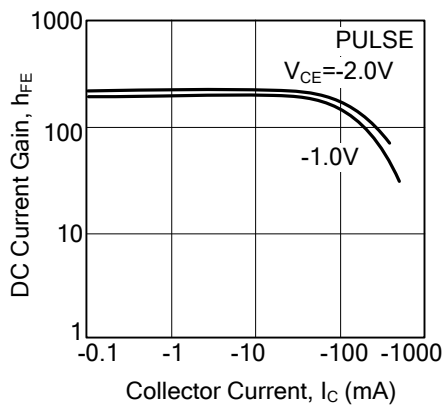


Figure 4. Base-Emitter Saturation Voltage

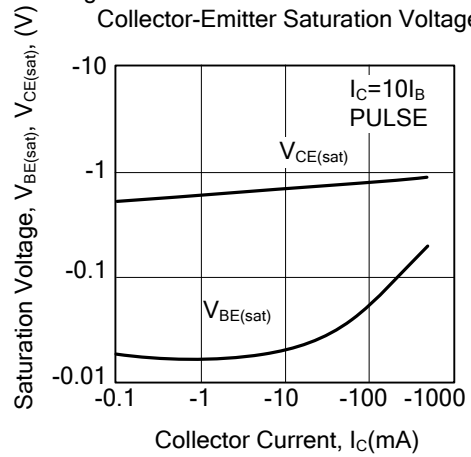


Figure 5. Base-Emitter On Voltage

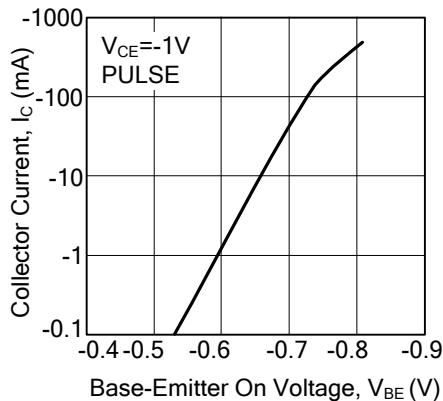
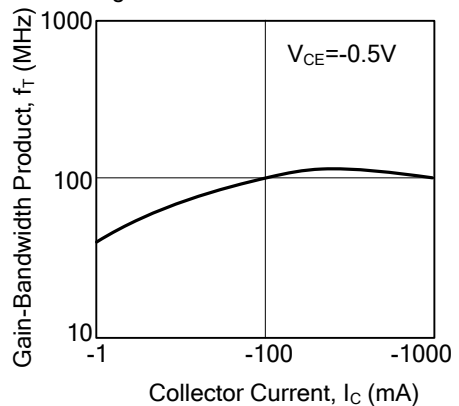
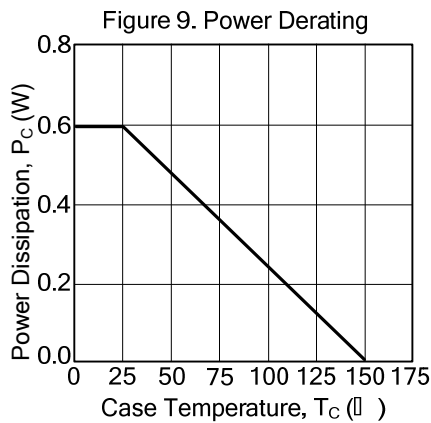
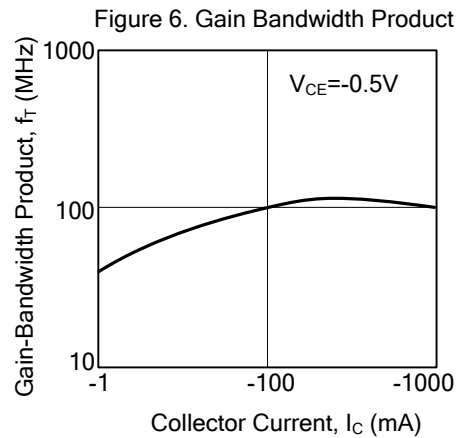
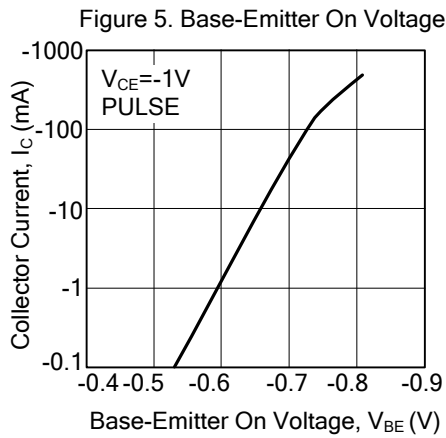


Figure 6. Gain Bandwidth Product



■ TYPICAL CHARACTERISTICS(Cont.)



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