

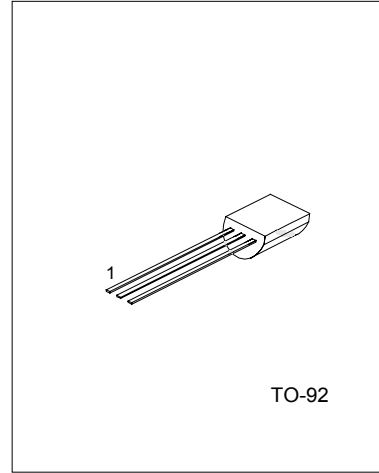
UTC BC327/328 PNP EPITAXIAL SILICON TRANSISTOR

SWITCHING AND AMPLIFIER APPLICATIONS

FEATURES

*Suitable for AF-Driver stages and low power output stages

*Complement to BC337/338



1: COLLECTOR 2: BASE 3: EMITTER

ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-emitter voltage : BC327	V _{CES}	-50	V
: BC328		-30	V
Collector-emitter voltage : BC327	V _{CEO}	-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	150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-emitter breakdown voltage : BC327	V _{VCEO}	I _c =-10mA, I _B =0	-45			V
: BC328			-25			V
Collector-emitter breakdown voltage : BC327	V _{VCES}	I _c =-0.1mA, V _{BE} =0	-50			V
: BC328			-30			V
Emitter-base breakdown voltage	V _{VEBO}	I _E =-10mA, I _c =0	-5			V
Collector Cut-off Current : BC327	I _{CEs}	V _{CE} =-45V, I _B =0		-2	-100	nA
: BC328			V _{CE} =-25V, I _B =0		-2	-100
DC current gain	h _{FE1}	V _{CE} =-1V, I _c =-100mA	100		630	
	h _{FE2}	V _{CE} =-1V, I _c =-300mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =-500mA, I _B =-50mA			-0.7	V

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PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Base-emitter on voltage	$V_{BE(on)}$	$V_{CE}=-1V, I_c=-300mA$			-1.2	V
Current gain bandwidth product	f_T	$V_{CE}=-5V, I_c=-10mA, f=20MHz$		100		MHz
Output Capacitance	C_{ob}	$V_{CB}=-10V, I_E=0, f=1MHz$		12		pF

CLASSIFICATION OF h_{FE}

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

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TYPICAL CHARACTERISTICS

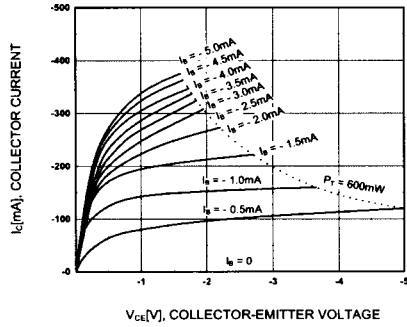


Figure 1. Static Characteristic

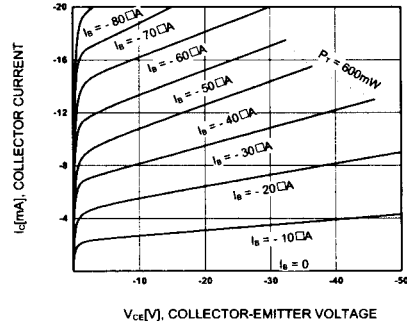


Figure 2. Static Characteristic

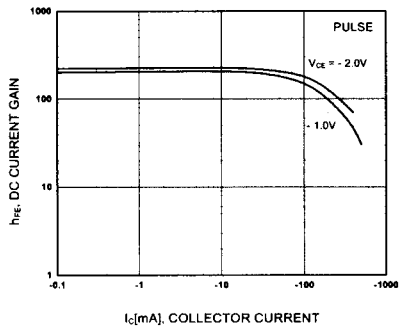


Figure 3. DC current Gain

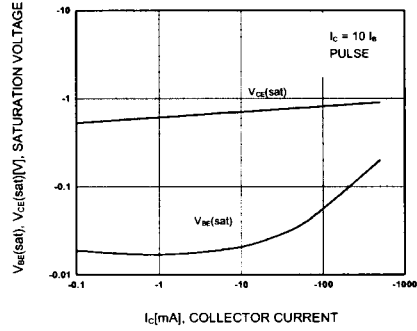


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

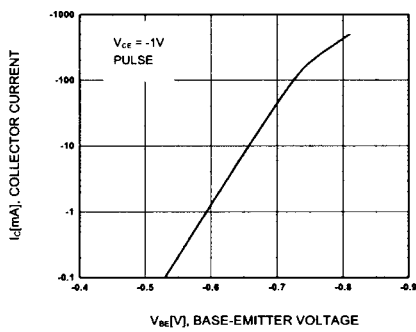


Figure 5. Base-Emitter On Voltage

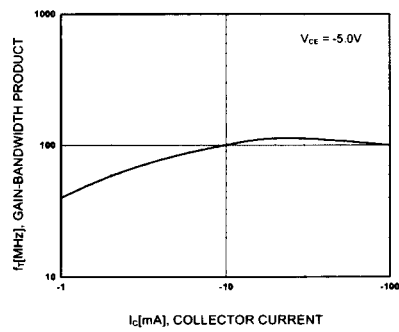


Figure 6. Gain Bandwidth Product

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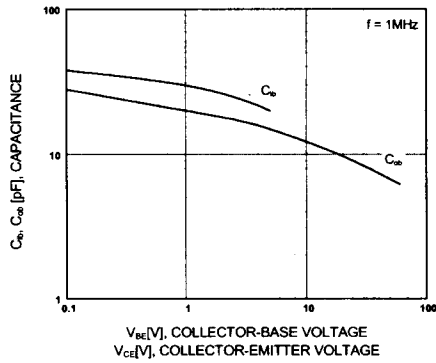


Figure 7. Input and Output Capacitance vs. Reverse Voltage

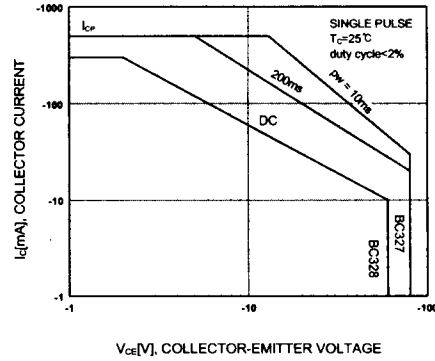


Figure 8. Safe Operating Area

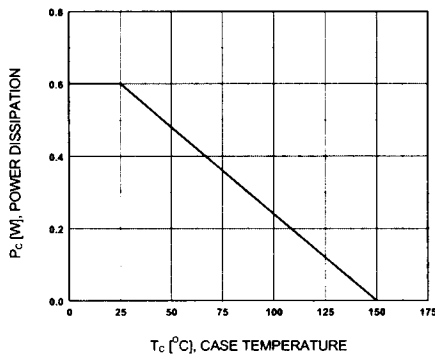


Figure 9. Power Derating

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