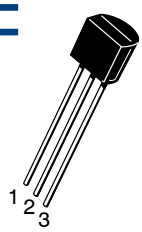
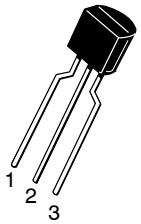
BC327/328(PNP)

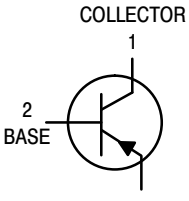
TO-92 Bipolar Transistors



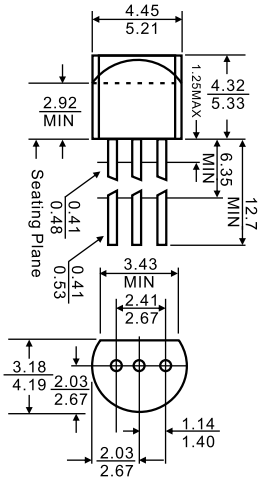
STRAIGHT LEAD
BULK PACK



BENT LEAD
TAPE & REEL
AMMO PACK



TO-92



Dimensions in inches and (millimeters)

Features

✧ **Power dissipation**

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter		Value	Units
V_{CBO}	Collector-Base Voltage	**BC327** **BC328**	-50 -30	V
V_{CEO}	Collector-Emitter Voltage	**BC327** **BC328**	-45 -25	V
V_{EBO}	Emitter-Base Voltage		-5	V
I_C	Collector Current -Continuous		-800	mA
P_C	Collector Power Dissipation		625	mW
T_j	Junction Temperature		150	℃
T_{stg}	Storage Temperature		-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage **BC327** **BC328**	V_{CBO}	I_C= -100uA, I_E=0	 -50 -30			V
Collector-emitter breakdown voltage **BC327** **BC328**	V_{CEO}	I_C= -10mA , I_B=0	 -45 -25			V
Emitter-base breakdown voltage	V_{EBO}	I_E= -10uA, I_C=0	-5			V
Collector cut-off current **BC327** **BC328**	I_{CBO}	V_{CB}= -45 V , I_E=0 V_{CB}= -25V , I_E=0			-0.1 -0.1	uA
Collector cut-off current **BC327** **BC328**	I_{CEO}	V_{CE}= -40 V , I_B=0 V_{CE}= -20 V , I_B=0			-0.2 -0.2	uA
Emitter cut-off current	I_{EBO}	V_{EB}= -4 V , I_C=0			-0.1	uA
DC current gain	$h_{FE(1)}$	V_{CE}=-1 V, I_C= -100mA	100		630	
	$h_{FE(2)}$	V_{CE}=-1 V, I_C= -300mA	40			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-500mA, I_B= -50mA			-0.7	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= -500mA, I_B=-50mA			-1.2	V
Base-emitter voltage	V_{BE}	V_{CE}=-1 V, I_C= -300mA			-1.2	V
Transition frequency	f_T	V_{CE}= -5V, I_C= -10mA f = 100MHz	260			MHz
Collector Output Capacitance	Cob	V_{CB}=-10V,I_E=0 f=1MHZ		12		pF

CLASSIFICATION OF h_{FE}

Rank	16	25	40
Range	100-250	160-400	250-630

Typical Characteristics

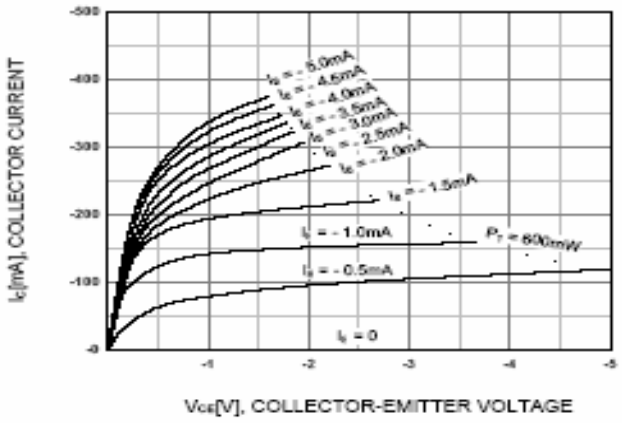


Figure 1. Static Characteristic

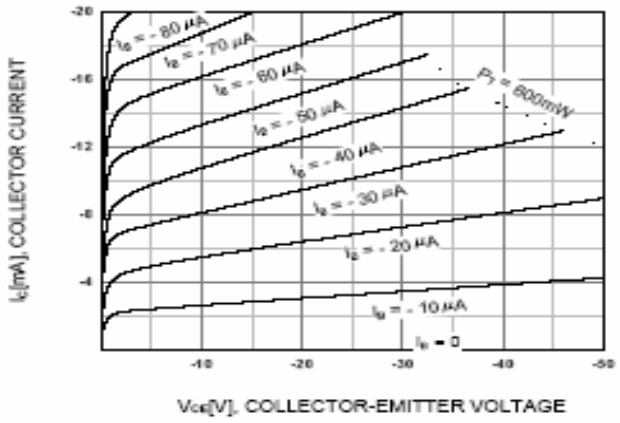


Figure 2. Static Characteristic

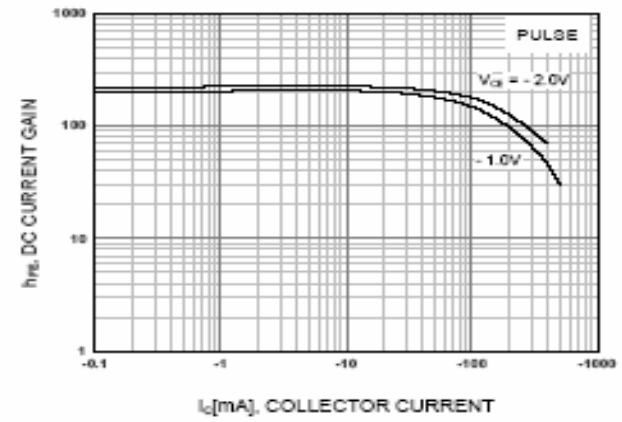


Figure 3. DC current Gain

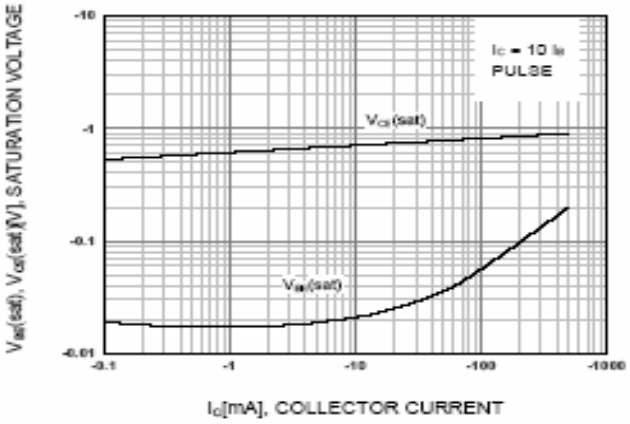


Figure 4. Base-Emitter Saturation Voltage
Collector-Emitter Saturation Voltage

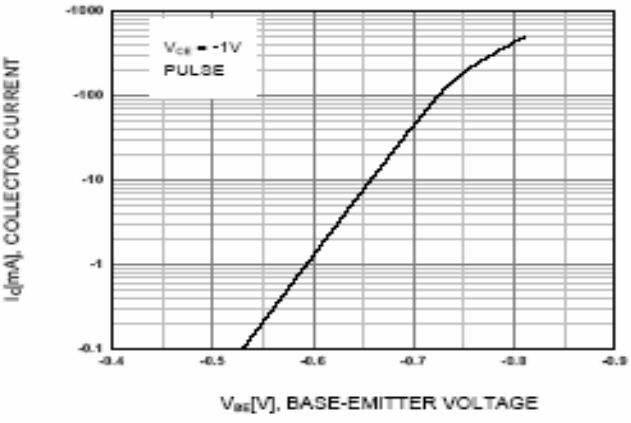


Figure 5. Base-Emitter On Voltage

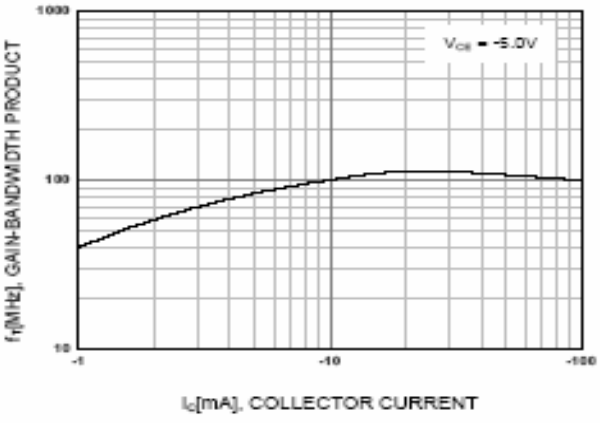


Figure 6. Gain Bandwidth Product

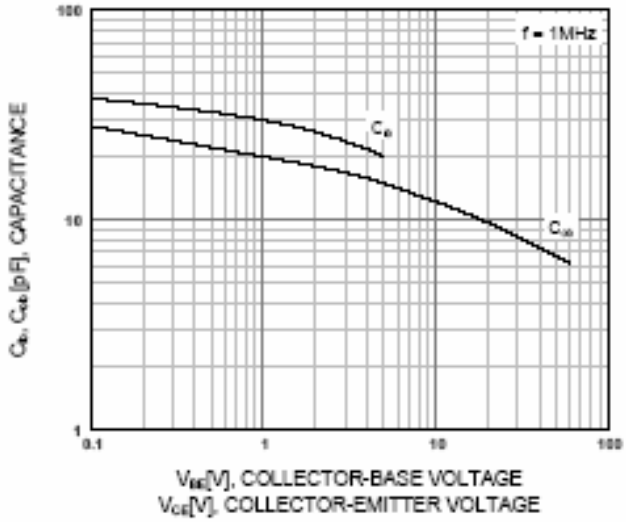


Figure 7. Input and Output Capacitance vs. Reverse Voltage

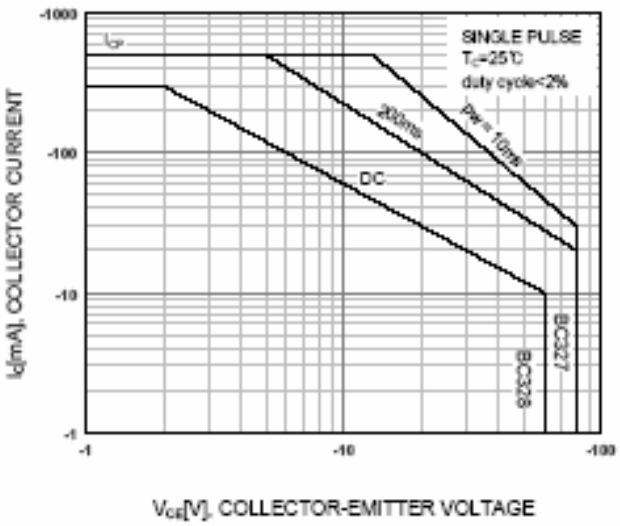
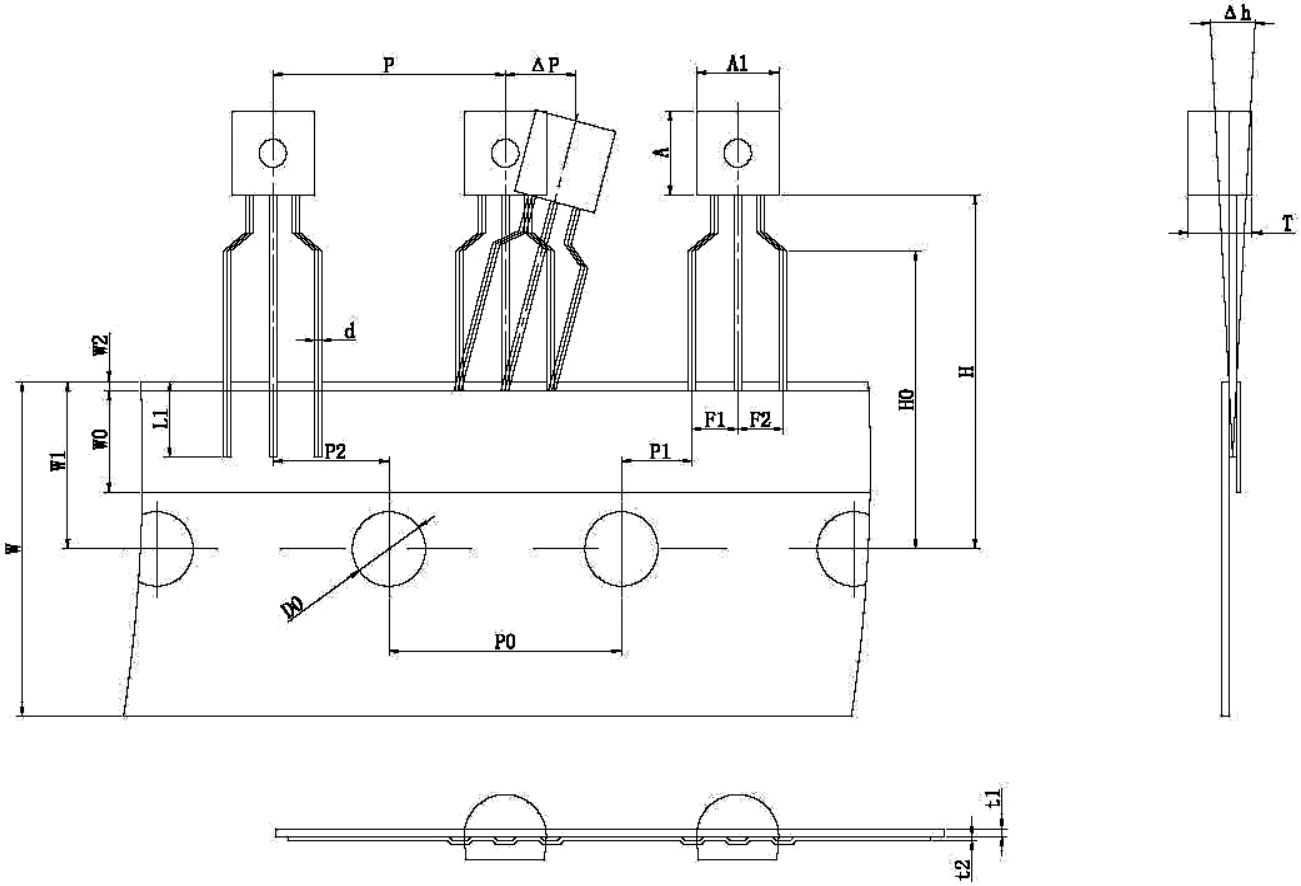


Figure 8. Safe Operating Area

TO-92 PACKAGE TAPEING DIMENSION



Item	Symbol	Value & Tolerance
Body width	A1	4.5 ± 0.1
Body height	A	4.5 ± 0.1
Body thickness	T	3.5 ± 0.1
Lead wire diameter	d	0.46 + 0.09, - 0.08
Pitch of component	P	12.7 ± 0.3
Feed hole pitch	P0	12.7 ± 0.2
Hole center to component center	P2	6.35 ± 0.3
Lead to lead distance	F1,F2	2.5 ± 0.3
Component alignment, F-R	△h	0 ± 1.0
Type width	W	18.0 + 1.0, - 0.5
Hole down tape width	W0	6.0 ± 0.5
Hole position	W1	9.0 ± 0.5
Hole down tape position	W2	1.0 MAX
Height of component from tape center	H	19.0 +2.0, -0
Lead wire clinch height	H0	16.0 ± 0.5
Lead wire(tape portion)	L1	2.5 MIN
Feed hole diameter	D0	4.0 ± 0.2
Taped Lead Thickness	t1	0.4 ± 0.05
Carrier Tape Thickness	t2	0.2 ± 0.05
Position of hole	P1	3.85 ± 0.3
Component alignment	△P	0 ± 1.0

Unit : mm