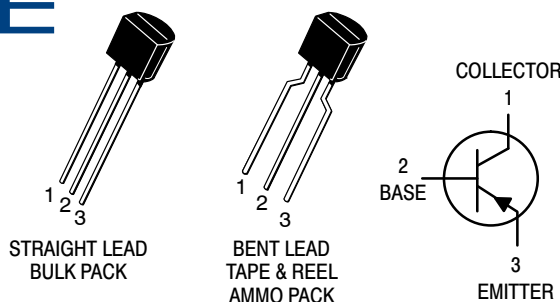


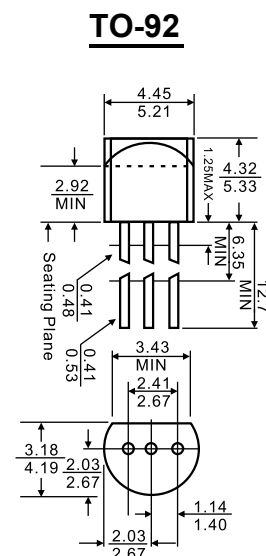


Features

- ✧ Power dissipation

MAXIMUM RATINGS (T_A=25°C 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	°C
T _{stg}	Storage Temperature	-55-150	°C



Dimensions in inches and (millimeters)

ELECTRICAL CHARACTERISTICS (T_{amb}=25°C 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	C _{ob}	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

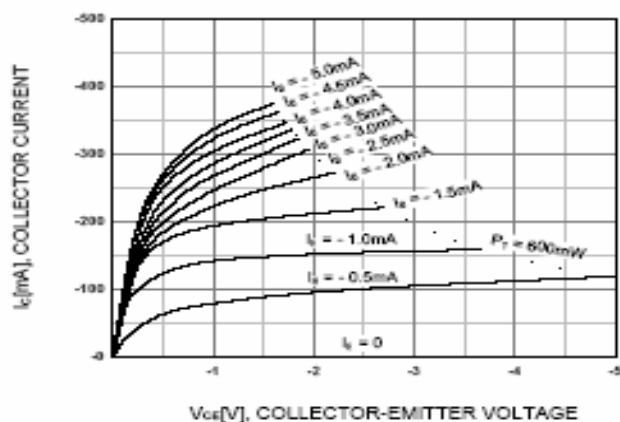


Figure 1. Static Characteristic

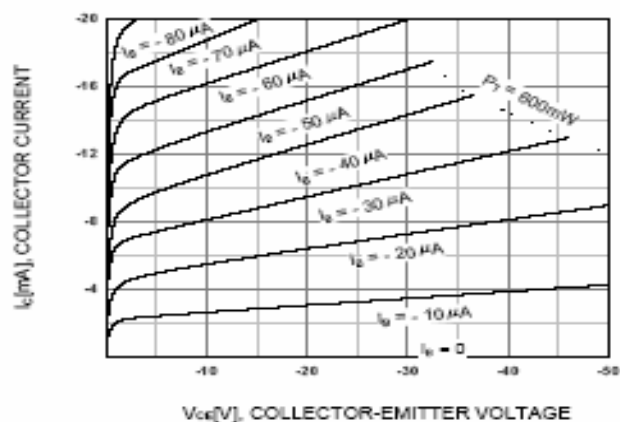


Figure 2. Static Characteristic

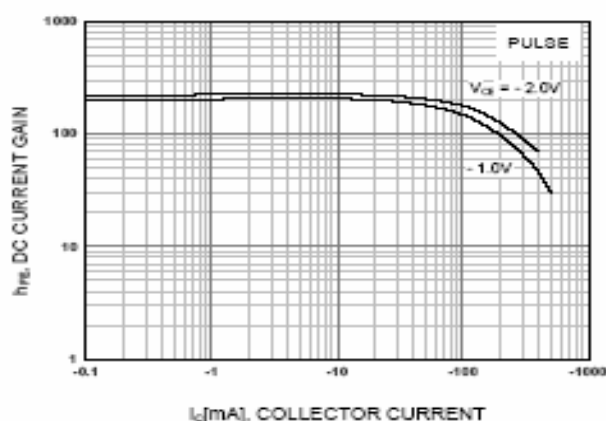


Figure 3. DC current Gain

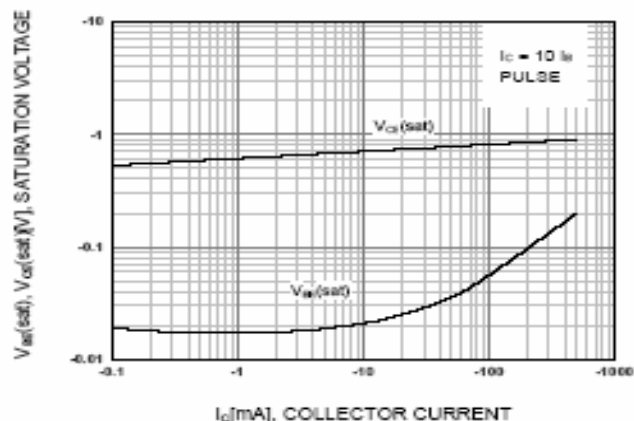


Figure 4. Base-Emitter Saturation Voltage
Collector-Emmitter Saturation Voltage

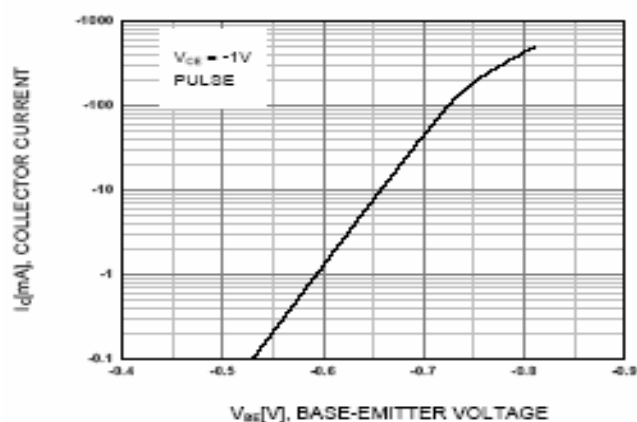


Figure 5. Base-Emitter On Voltage

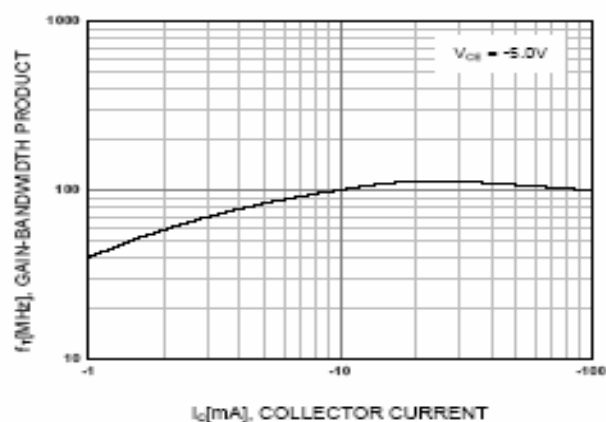


Figure 6. Gain Bandwidth Product

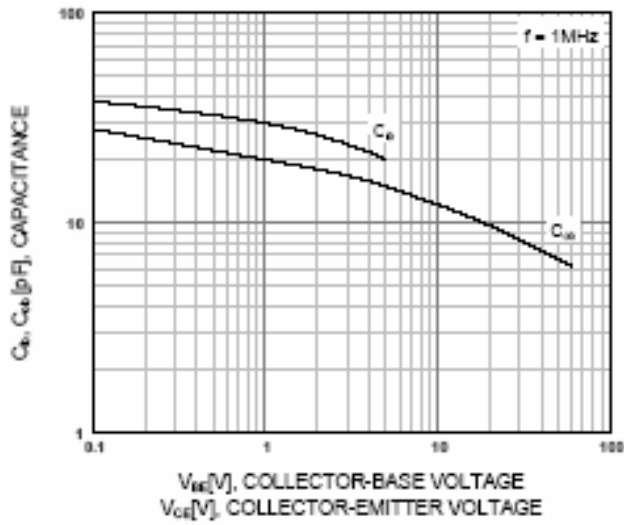


Figure 7. Input and Output Capacitance vs. Reverse Voltage

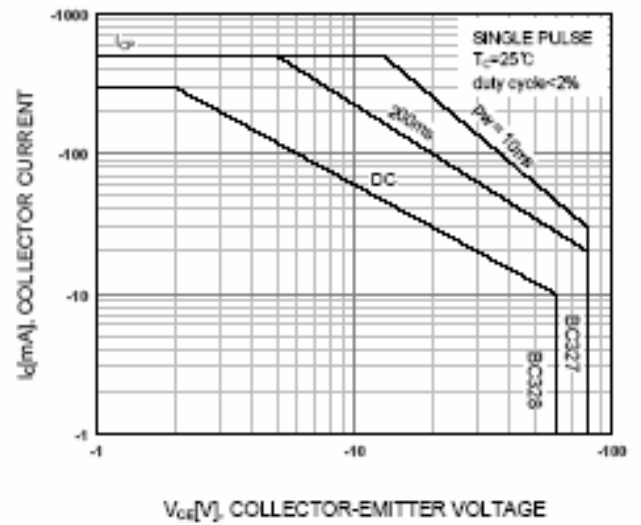
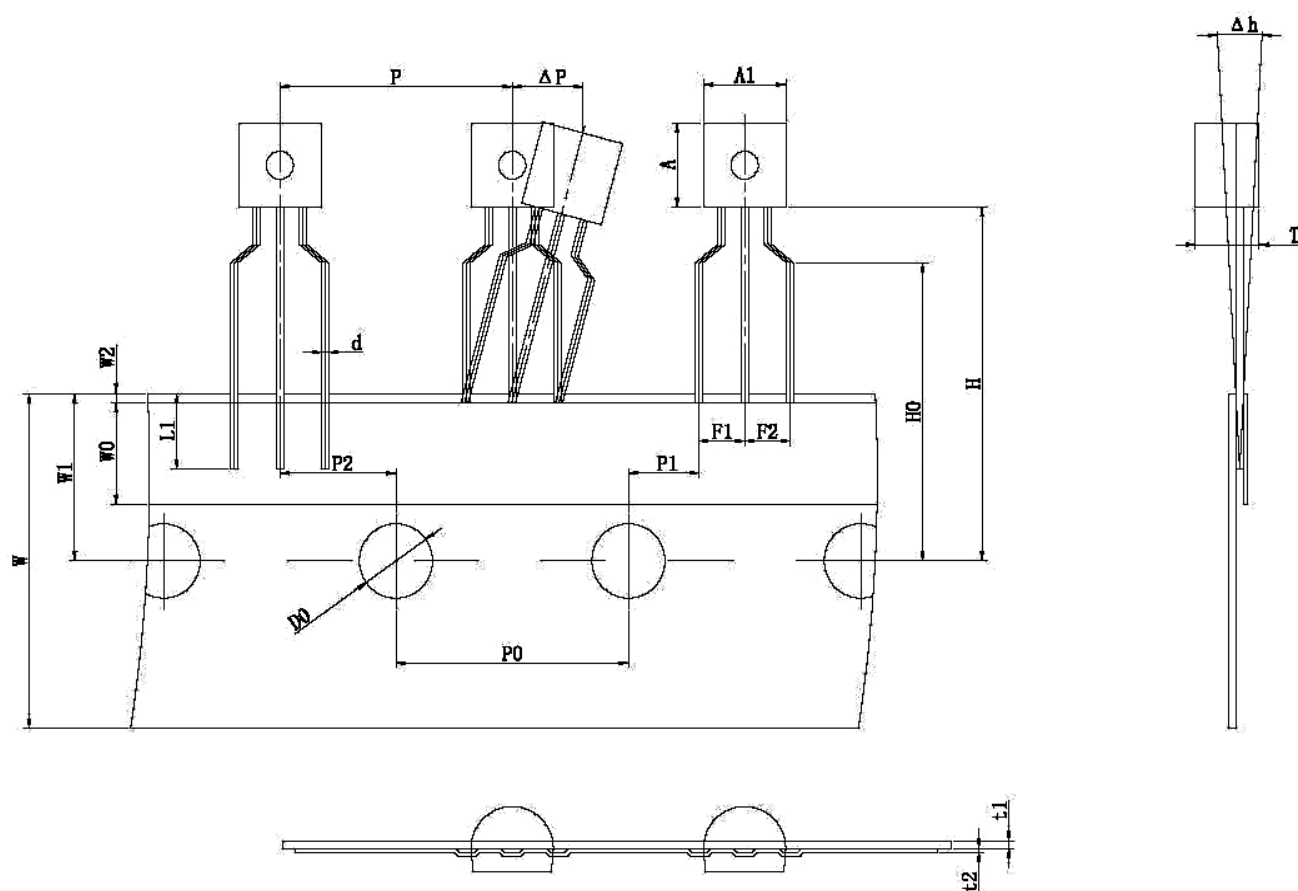


Figure 8. Safe Operating Area

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	Δh	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	ΔP	0 ± 1.0

Unit : mm