

TO-92 Plastic-Encapsulate Transistors

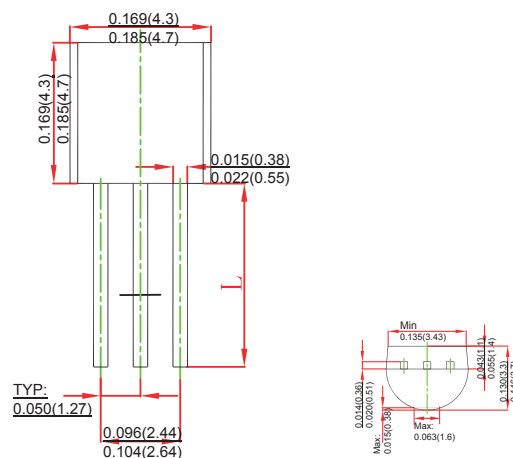
FEATURES

- High Voltage
- Complement to BC546,BC547,BC548
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style:TO-126 molded plastic
- Mounting position:any

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	BC556	V
		BC557	
		BC558	
V_{CEO}	Collector-Emitter Voltage	BC556	V
		BC557	
		BC558	
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current-Continuous	-0.1	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	°C/W
T_j	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55~+150	°C

ORDERING INFORMATION

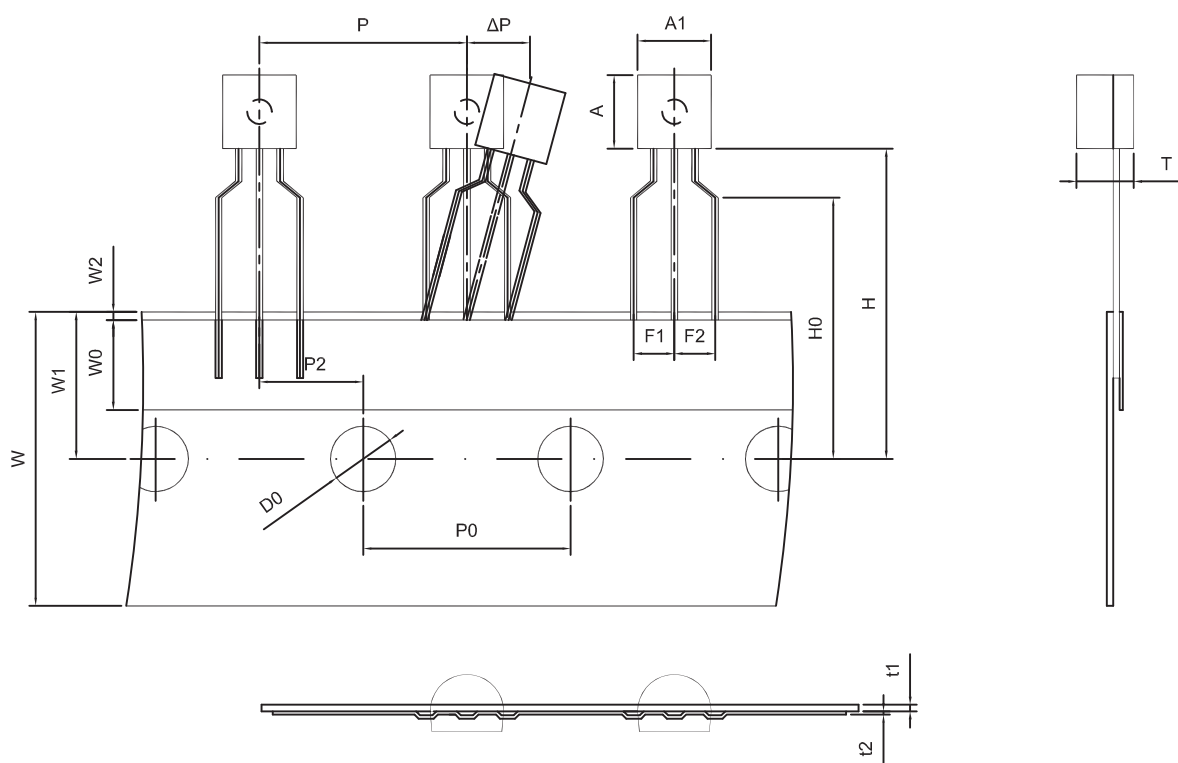
Part Number	Package	Packing Method	Pack Quantity
BC556	TO-92	Bulk	1000pcs/Bag
BC556-TA	TO-92	Tape	2000pcs/Box
BC557	TO-92	Bulk	1000pcs/Bag
BC557-TA	TO-92	Tape	2000pcs/Box
BC558	TO-92	Bulk	1000pcs/Bag
BC558-TA	TO-92	Tape	2000pcs/Box

Parameter		Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	BC556	$V_{(BR)CBO}$	$I_C = -0.1\text{mA}, I_E = 0$	-80			V
	BC557			-50			
	BC558			-30			
Collector-emitter breakdown voltage	BC556	$V_{(BR)CEO}$	$I_C = -2\text{mA}, I_B = 0$	-65			V
	BC557			-45			
	BC558			-30			
Emitter-base breakdown voltage		$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	BC556	I_{CBO}	$V_{CB} = -70\text{V}, I_E = 0$			-0.1	μA
	BC557		$V_{CB} = -45\text{V}, I_E = 0$			-0.1	μA
	BC558		$V_{CB} = -25\text{V}, I_E = 0$			-0.1	μA
Collector cut-off current	BC556	I_{CEO}	$V_{CE} = -60\text{V}, I_B = 0$			-0.1	μA
	BC557		$V_{CE} = -40\text{V}, I_B = 0$			-0.1	μA
	BC558		$V_{CE} = -25\text{V}, I_B = 0$			-0.1	μA
Emitter cut-off current		I_{EBO}	$V_{EB} = -5\text{V}, I_C = 0$			-0.1	μA
DC current gain		h_{FE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	120		800	
Collector-emitter saturation voltage		$V_{CE(sat)}$	$I_C = -10\text{mA}, I_B = -0.5\text{mA}$			-0.3	V
			$I_C = -100\text{mA}, I_B = -5\text{mA}$			-0.65	V
Base-emitter saturation voltage		$V_{BE(sat)}$	$I_C = -10\text{mA}, I_B = -0.5\text{mA}$			-0.8	V
			$I_C = -100\text{mA}, I_B = -5\text{mA}$			-1	V
Base-emitter voltage		V_{BE}	$V_{CE} = -5\text{V}, I_C = -2\text{mA}$	-0.55		-0.7	V
			$V_{CE} = -5\text{V}, I_C = -10\text{mA}$			-0.82	V
Collector output capacitance		C_{ob}	$V_{CB} = -10\text{V}, I_E = 0, f = 1\text{MHz}$			6	pF
Transition frequency	BC556	f_T	$V_{CE} = -5\text{V}, I_C = -10\text{mA}, f = 100\text{MHz}$		150		MHz
	BC557				150		MHz
	BC558				150		MHz

CLASSIFICATION of h_{FE}

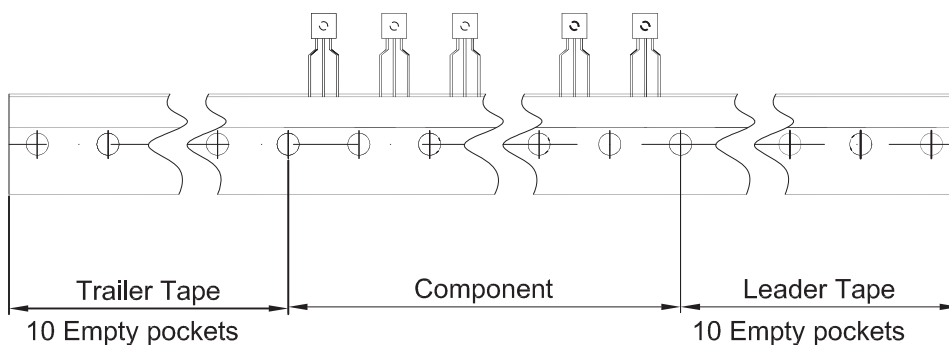
RANK	A	B	C
RANGE	120-220	180-460	420-800

TO-92 PACKAGE TAPEING DIMENSION



Dimiensions are in millimeter

A1	A	T	P	P0	P2	F1	F2	W
4.5	4.5	3.5	12.7	12.7	6.35	2.5	2.5	18.0
W0	W1	W2	H	H0	D0	t1	t2	ΔP
6.0	9.0	1.0 MAX.	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92	2000 pcs	333×162×43	20,000 pcs	350×340×250