

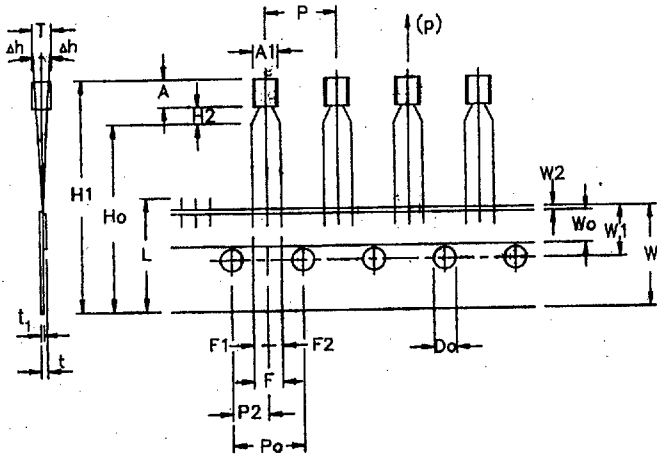
# TO-92 Plastic Package Transistors (PNP)



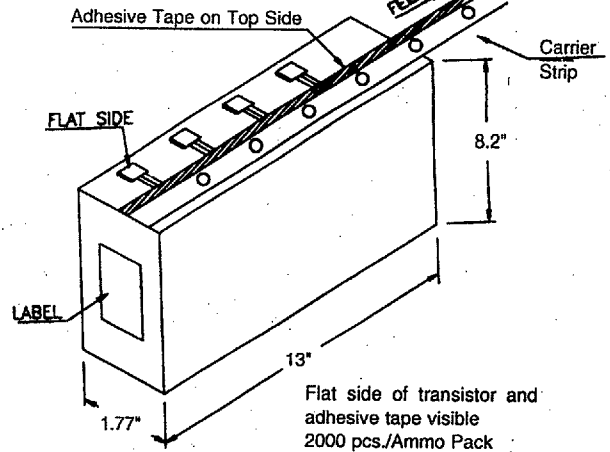
Maximum Ratings						Electrical Characteristics (Ta=25°C, Unless Otherwise Specified)																					
Type No.	V <sub>CBO</sub> (V)	V <sub>CEO</sub> (V)	V <sub>EB0</sub> (V)	P <sub>D</sub> (W)	I <sub>C</sub> (A)	I <sub>CBO</sub> (μA)	V <sub>CB</sub> @ (V)	I <sub>CES</sub> (μA)	V <sub>CE</sub> @ (V)	h <sub>FE</sub>	@	I <sub>C</sub> & (mA)	V <sub>CE</sub> (V)	V <sub>CE(SAT)</sub> (V)	V <sub>BE(SAT)</sub> (V)	I <sub>C</sub> @ (mA)	C <sub>ob</sub> (pF)	f <sub>i</sub> (MHz)	@	I <sub>C</sub> (mA)	t <sub>off</sub> (ns)	N <sub>F</sub> (dB)	@ Freq (MHz)	C <sub>re</sub> (pF)	CDIL Case Style		
	Min	Min	Min	@ Tc=25°C	Max	Max	Max	Max	Max	Min	Max	Min	Max	Max	Min	Max	Typ	Max	Min	Typ	Max	Max	Max	Max	Max		
BCX78-9	32	32	5	0.625	0.1			0.01	32	75		0.01	5	0.6	1	100	4.5						6	0.001		TO-92-4	
										250	460	2	5														
										160	630	10	1														
										60		100	1														
BCX78-10	32	32	5	0.625	0.1			0.01	32	100		0.01	5	0.6	1	100	2.6	4.5	200		10	800	6	0.001		TO-92-4	
										380	630	2	5														
										240	1000	10	1														
										60		100	2														
BCX79	45	45	5	0.625	0.1			0.01	45	80	1000	10	1	0.6	1	100	4.5						6	0.001		TO-92-4	
										40		100	1														
										120	630	2	5														
										20		0.01	5														
BCX79-7	45	45	5	0.625	0.1			0.01	45	120	220	2	5	0.6	1	100	4.5						6	0.001		TO-92-4	
										80		10	1														
										40		100	1														
										20		0.01	5														
BCX79-8	45	45	5	0.625	0.1			0.01	45	120	400	10	1	0.6	1	100	4.5						6	0.001		TO-92-4	
										45		100	1														
										40		0.01	5														
										180	310	2	5														
BF421	300	300	5	0.8	0.5	0.01	200			50		25	20	0.5	2	20		60		10				2.8		TO-92-1	
BF423	250	250	5	0.8	0.5	0.01	200			50		25	20	0.5	2	20		60		10				2.8		TO-92-1	
C100	60	50	5	0.5	1	0.05	40			50	280	150	1	0.6		150										TO-92-4	
CC327	50	45	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										100	600	100	1														
CC327-16	50	45	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										100	250	100	1														
CC327-40	50	45	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										250	600	100	1														
CC328	30	25	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										100	600	100	1														
CC328-16	30	25	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										100	250	100	1														
CC328-40	30	25	5	0.625	0.8	0.1	20			40		500	1	0.7		500	8		100		10					TO-92-1	
										250	600	100	1														
CD423	250	250	5	0.8	0.5	0.01	200			50		25	20	0.5		20		60		10				2.8		TO-92	
CD638	60	60	5	0.8	0.5	0.1	30			25		5	2	0.5		500	9		150		50					TO-92-4	
										40	160	150	2														
										25		500	2														
CD8550B	30	25	6	1.0	2	0.5	20			85	160	100	1	0.5	1.3	800	35	100		100						TO-92	
										40		800	1														
CD8550C	30	25	6	1.0	2	0.5	20			120	200	100	1	0.5	1.2	800	35	100		100						TO-92	
										40		800	1														
CD8550D	30	25	6	1.0	2	0.5	20			160	300	100	1	0.5	1.3	800	35	100		100						TO-92	
										40		800	1														
CD9012	40	30	5	0.625	0.5	0.1	25			64	465	50	1	0.2	1	150	10	200		50		6	0.001			TO-92	
										0.6					1.2	500											

\$ V<sub>CES</sub>

MECHANICAL DATA



Ammo Pack Style



Item	Symbol	Specification				Remarks
		Min.	Nom.	Max.	Tol.	
Body Width	A1	4.0		4.8		
Body Height	A	4.8		5.2		
Body Thickness	T	3.9		4.2		
Pitch of Component	P		12.7		±1	
Feed Hole Pitch	Po		12.7		±0.3	Cumulative Pitch Error 1.0 mm/20 Pitch
Feed Hole Centre to Component Centre	P2		6.35		±0.4	To be measured at bottom of Clinch
Distance between Outer Leads	F		5.08		±0.6	
Component Alignment	Δh		0	1	-0.2	At Top of Body
Tape Width	W		18		±0.5	
Hold-Down Tape Width	Wo		6		±0.2	
Hole Position	W1		9		±0.7	
Hold-Down Tape Position	W2		0.5		±0.2	
Lead Wire Clinch Height	Ho		16		±0.5	
Component Height	H1			32.25		
Length of Snipped leads	L			11.0		
Feed Hole Diameter	Do		4		±0.2	
Total Tape Thickness	t			1.2		t <sub>1</sub> 0.3-0.6
Lead-to-Lead Distance	F1,F2		2.54		+0.4 -0.1	
Clinch Height	H2			3		
Pull-out Force	(p)	6N				

Dimensions in m.m.

- Notes:**
1. Maximum alignment deviation between leads not to be greater than 0.2 mm.
  2. Maximum non-cumulative variation between tape feed holes shall not exceed 1 mm in 20 pitches
  3. Hold-down tape not to exceed beyond the edge(s) of carrier tape and there shall be no exposure of adhesive.
  4. No more than 3 consecutive missing components permitted.
  5. A tape trailer, having at least three feed holes is required after the last component.
  6. Splices shall not interfere with the sprocket feed holes.