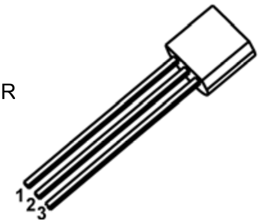
BC516 TRANSISTOR (PNP)

TO – 92

1.COLLECTOR

2.BASE

3.EMITTER



FEATURES

- High DC Current Gain
- High Collector Current

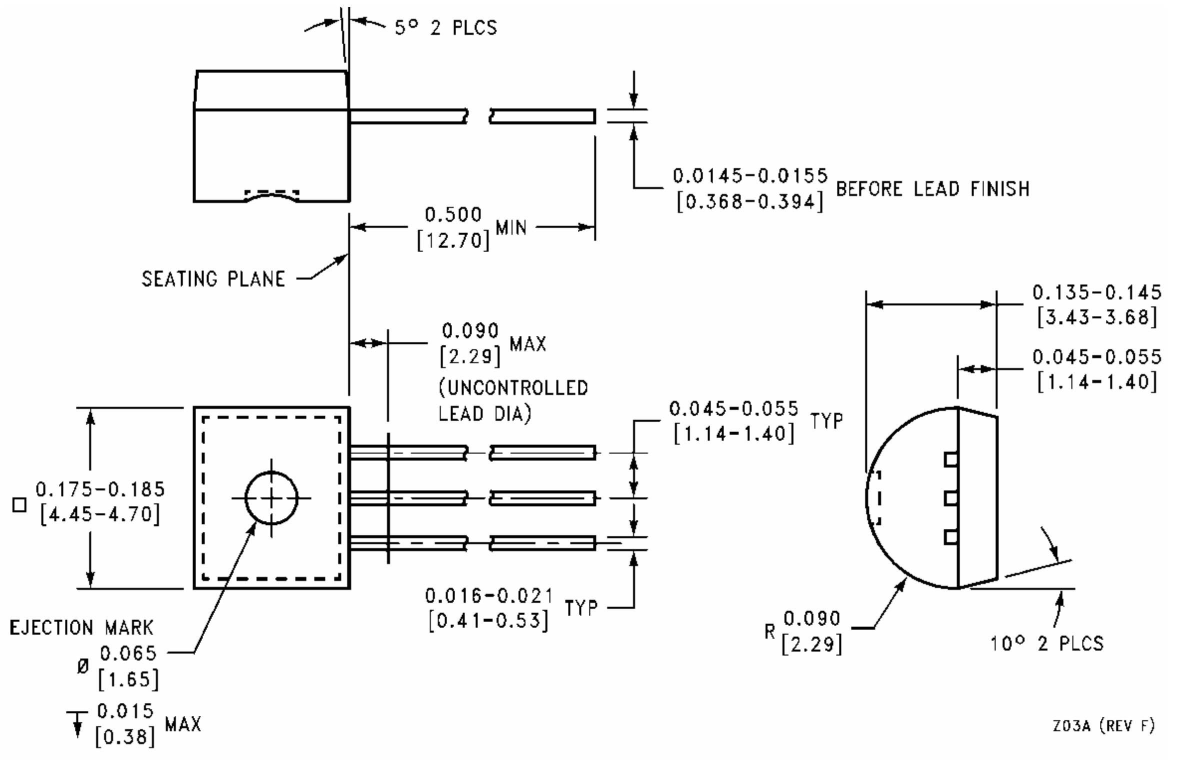
MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-40	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-10	V
I_C	Collector Current	-1	A
P_C	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance Junction To Ambient	200	℃/W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~+150	℃

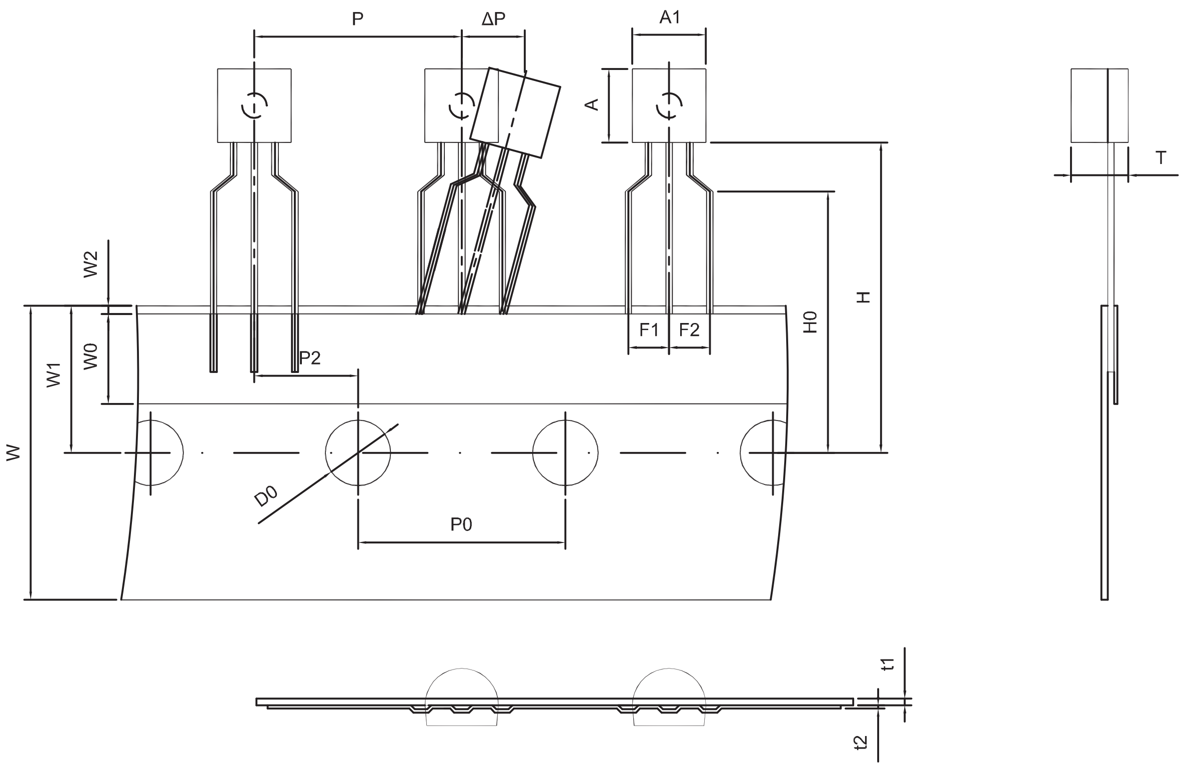
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -0.1mA,I_E=0	-40			V
Collector-emitter breakdown	$V_{(BR)CEO}$	I_C=-2mA,I_B=0	-30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10μA,I_C=0	-10			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V,I_E=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-2V, I_C=-20mA	30000			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100mA,I_B=-0.1mA			-1	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=-100mA,I_B=-0.1mA			-1.5	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-10mA			-1.4	V
Transition frequency	f_T	V_{CE}=-5V,I_C=-10mA, f=100MHz		200		MHz

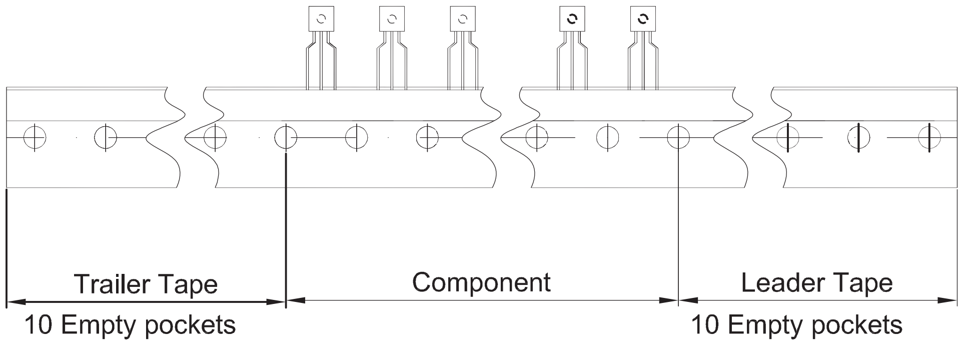
TO-92 : mm


5° 2 PLCS
0.0145-0.0155 [0.368-0.394] BEFORE LEAD FINISH
0.500 [12.70] MIN
SEATING PLANE
0.135-0.145 [3.43-3.68]
0.090 [2.29] MAX
(UNCONTROLLED LEAD DIA)
0.045-0.055 [1.14-1.40]
0.045-0.055 [1.14-1.40] TYP
□ 0.175-0.185 [4.45-4.70]
0.016-0.021 [0.41-0.53] TYP
R 0.090 [2.29]
10° 2 PLCS
EJECTION MARK
Ø 0.065 [1.65]
0.015 [0.38] MAX
Z03A (REV F)

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