

TO-92 Plastic-Encapsulate Transistors

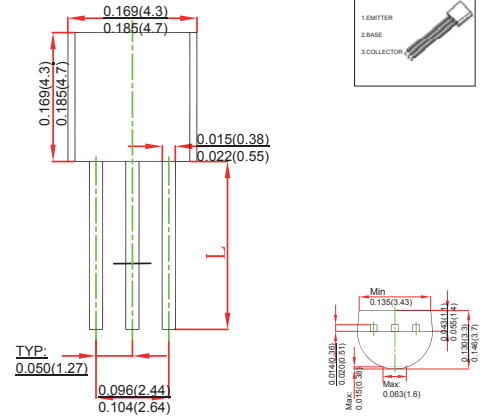
FEATURE

- Switching and Amplification in High Voltage Applications such as telephony
- Low Current(max. 600mA)
- High Voltage(max. 130v)
- TRANSISTOR (PNP)

MECHANICAL DATA

- Case style: TO-92 molded plastic
- Mounting position: any

TO-92



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

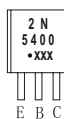
Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-130	V
V _{CEO}	Collector-Emitter Voltage	-120	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.6	A
P _D	Collector Power Dissipation	625	mW
R _{θJA}	Thermal Resistance from Junction to Ambient	200	°C /W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55~+150	°C

ORDERING INFORMATION

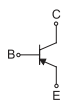
Part Number	Package	Packing Method	Pack Quantity
2N5400	TO-92	Bulk	1000pcs/Bag
2N5400-TA	TO-92	Tape	2000pcs/Box

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C =-100μA, I _E =0	-130			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C =-1mA, I _B =0	-120			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -100 V, I _E =0			-0.1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -3 V, I _C =0			-0.1	μA
DC current gain	h _{FE1}	V _{CE} = -5 V, I _C =-1mA	30			
	h _{FE2}	V _{CE} = -5 V, I _C = -10mA	40		180	
	h _{FE3}	V _{CE} = -5 V, I _C =-50mA	40			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -10mA, I _B = -1mA			-0.2	V
	V _{CE(sat)}	I _C = -50mA, I _B = -5mA			-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -10mA, I _B = -1mA			-1	V
	V _{BE(sat)}	I _C = -50mA, I _B = -5mA			-1	V
Transition frequency	f _T	V _{CE} =-10V, I _C =-10mA f=30MHz	100			MHz
Collector output capacitance	C _{ob}	V _{CB} =-10V, I _E =0, f=1MHz			6	pF

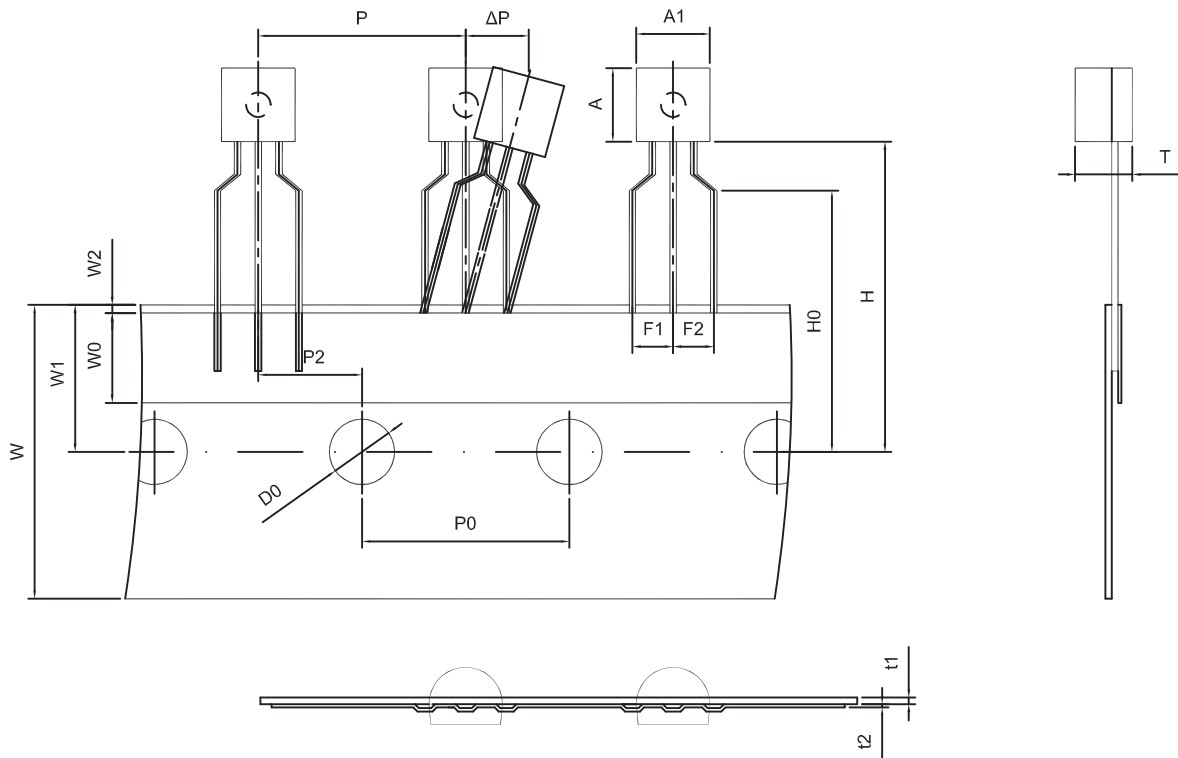
MARKING


 2N5400=Device code
 Solid dot=Green molding compound device,
 if none, the normal device
 XXX=Code

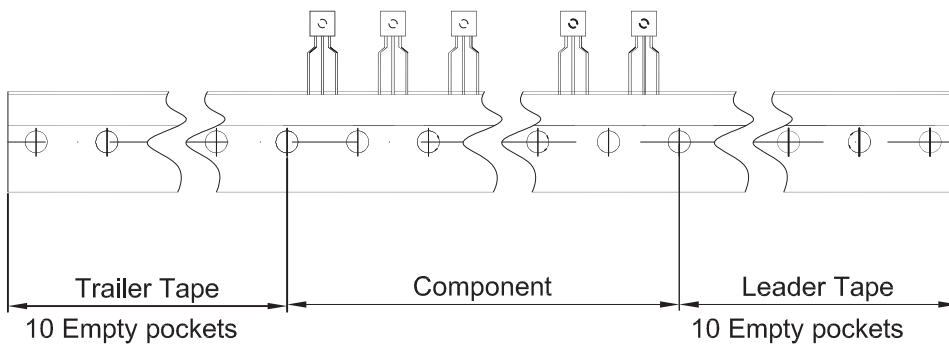
Equivalent Circuit



TO-92 PACKAGE TAPEING DIMENSION



Dimensions 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