

TO-92L Plastic-Encapsulate Transistors

TPT5610 TRANSISTOR (PNP)

FEATURES

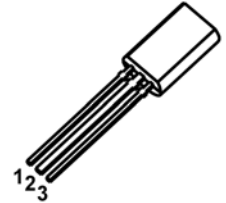
- Excellent Linearity of Current Gain
- Low saturation voltage
- Complementary to TPT5609

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector- Base Voltage	-25	V
V _{CE0}	Collector-Emitter Voltage	-20	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-1	A
P _C	Collector Power Dissipation	1	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

TO-92L

1. EMITTER
2. COLLECTOR
3. BASE



ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -10μA, I _E = 0	-25			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B = 0	-20			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C = 0	-5			V
Collector cut-off current	I _{CB0}	V _{CB} = -20V, I _E = 0			-1	μA
Emitter cut-off current	I _{EBO}	V _{EB} = -5V, I _C = 0			-1	μA
DC current gain	h _{FE}	V _{CE} = -2V, I _C = -500mA	60		240	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -800mA, I _B = -80mA			-0.5	V
Base-emitter voltage	V _{BE}	V _{CE} = -2V, I _C = -500mA			-1	V
Transition frequency	f _T	V _{CE} = -2V, I _C = -500mA		350		MHz
Collector output capacitance	C _{ob}	V _{CB} = -10V, I _E = 0, f = 1MHz		38		pF

CLASSIFICATION OF h_{FE}

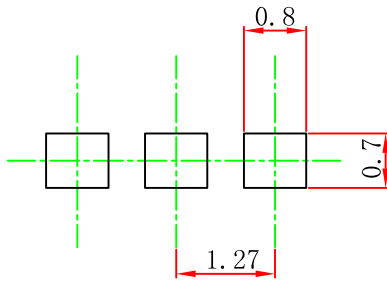
Rank	A	B	C
Range	60-120	85-170	120-240

TO-92L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.750	4.050	0.148	0.159
A1	1.280	1.580	0.050	0.062
b	0.380	0.550	0.015	0.022
b1	0.620	0.780	0.024	0.031
c	0.350	0.450	0.014	0.018
D	4.750	5.050	0.187	0.199
D1	4.000		0.157	
E	7.850	8.150	0.309	0.321
e	1.270 TYP.		0.050 TYP.	
e1	2.440	2.640	0.096	0.104
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.300	0.000	0.012

TO-92L Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

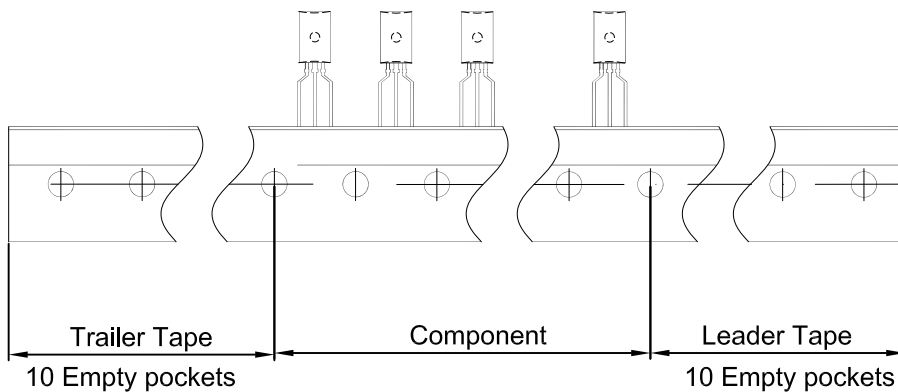
NOTICE

JCET reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JCET does not assume any liability arising out of the application or use of any product described herein.

TO-92L PACKAGE TAPING DIMENSION



Dimensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
4.9	8.0	3.9	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	19.0	16.0	4.0	0.4	0.2	0



Package	Box	Box Size(mm)	Carton	Carton Size(mm)
TO-92L	2000 pcs	333×203×42	20,000 pcs	493×400×264