

## TO-92L Plastic-Encapsulate Transistors

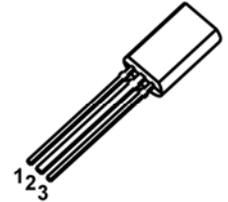
### 2SC2482 TRANSISTOR (NPN)

#### FEATURE

- High Voltage : $V_{CEO}=300V$
- Small Collector Output Capacitance:  $C_{ob}=3.0pF(Typ)$

#### TO-92L

1. EMITTER
2. COLLECTOR
3. BASE



#### MAXIMUM RATINGS ( $T_a=25^{\circ}C$ unless otherwise noted)

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage	300	V
$V_{CEO}$	Collector-Emitter Voltage	300	V
$V_{EBO}$	Emitter-Base Voltage	7	V
$I_C$	Collector Current -Continuous	0.1	A
$P_C$	Collector Power Dissipation	0.9	W
$T_J$	Junction Temperature	150	$^{\circ}C$
$T_{stg}$	Storage Temperature	-55-150	$^{\circ}C$

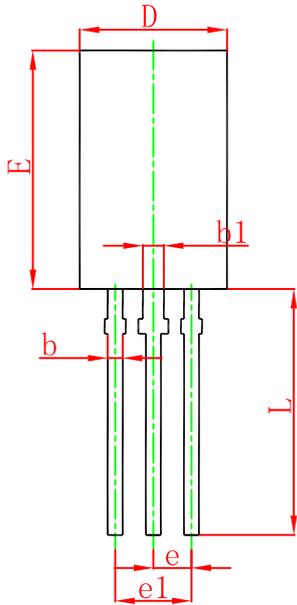
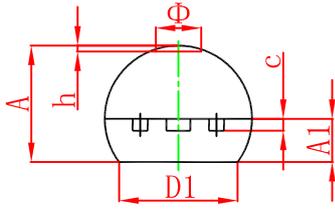
#### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C=100\mu A, I_E=0$	300			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C=3mA, I_B=0$	300			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E=100\mu A, I_C=0$	7			V
Collector cut-off current	$I_{CBO}$	$V_{CB}=240V, I_E=0$			1.0	$\mu A$
Collector cut-off current	$I_{CEO}$	$V_{CB}=220V, I_B=0$			5.0	$\mu A$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=7V, I_C=0$			1.0	$\mu A$
DC current gain	$h_{FE}$	$V_{CE}=10V, I_C=20mA$	30		150	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=10mA, I_B=1mA$			1.0	V
Transition frequency	$f_T$	$V_{CE}=10V, I_C=20mA, f=30MHz$	50			MHz
Collector output capacitance	$C_{ob}$	$V_{CB}=20V, I_E=0, f=1MHz$		3		pF

#### CLASSIFICATION OF $h_{FE}$

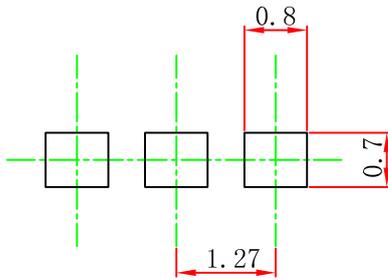
Rank	O	Y
Range	30-90	90-150

## 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
$\Phi$		1.600		0.063
h	0.000	0.300	0.000	0.012

## TO-92L Suggested Pad Layout



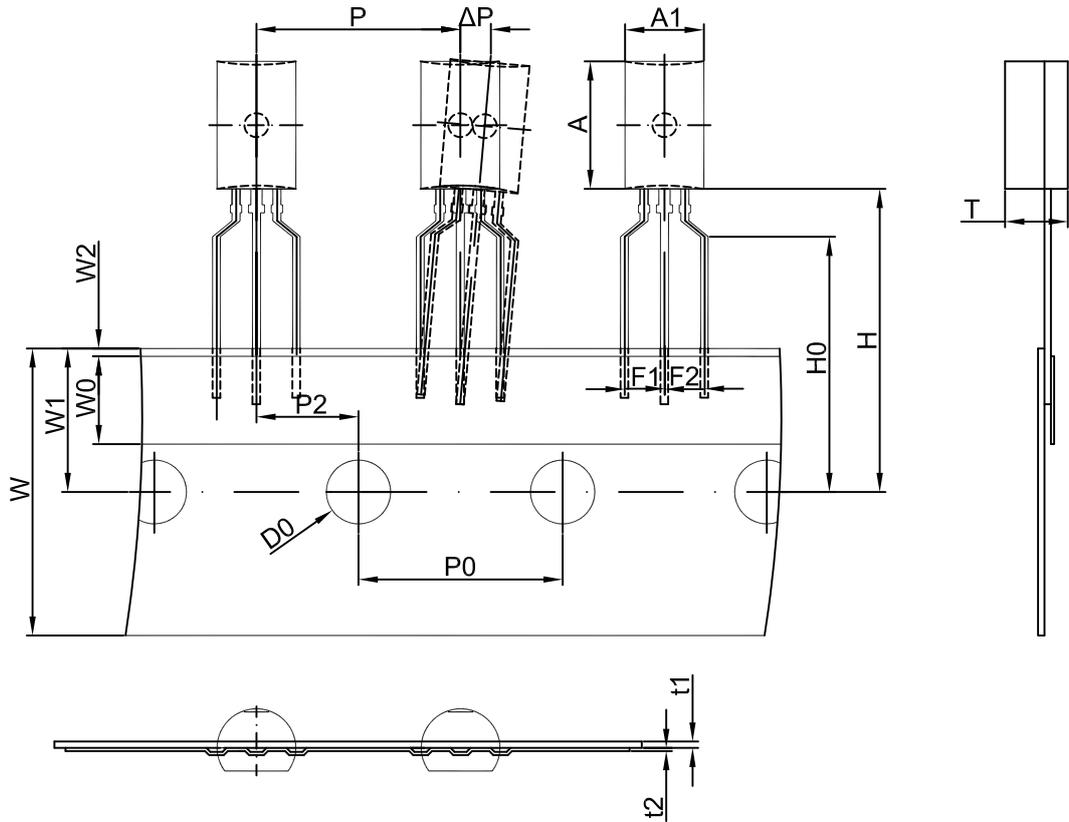
### Note:

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
3. The pad layout is for reference purposes only.

### NOTICE

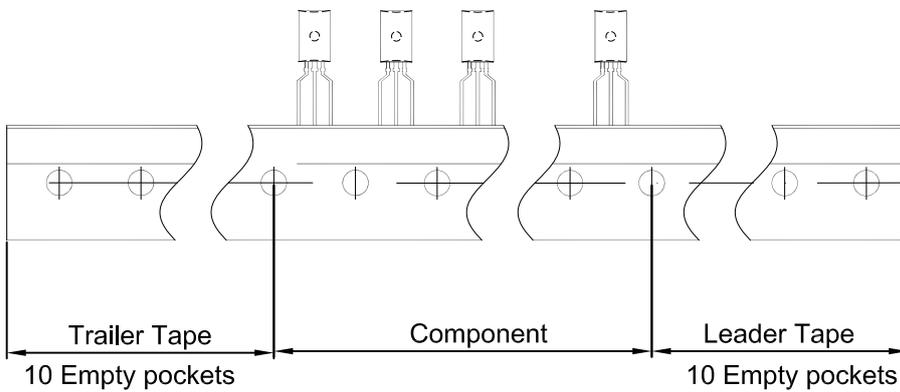
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# TO-92L PACKAGE TAPEING DIMENSION



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