JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

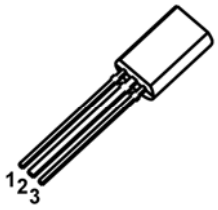
JSCJ

TO-92L Plastic-Encapsulate Transistors

2SA966 TRANSISTOR (PNP)

TO-92L

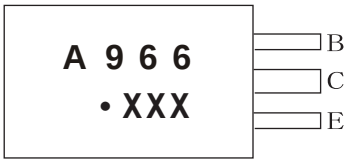
1. EMITTER
2. COLLECTOR
3. BASE



FEATURE

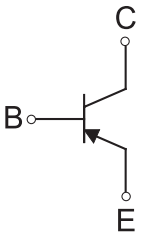
- Complementary to 2SC2236 and 3 Watts Output Applications.

MARKING



A966=Device code
Solid dot = Green molding compound device, if none, the normal device
XXX=Code

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SA966	TO-92L	Bulk	500pcs/Bag
2SA966-TA	TO-92L	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-1.5	A
Pc	Collector Power Dissipation	0.9	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS

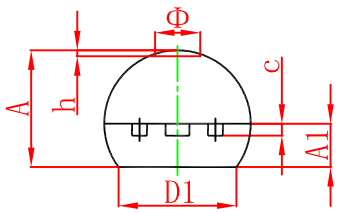
T_a=25℃ unless otherwise specified

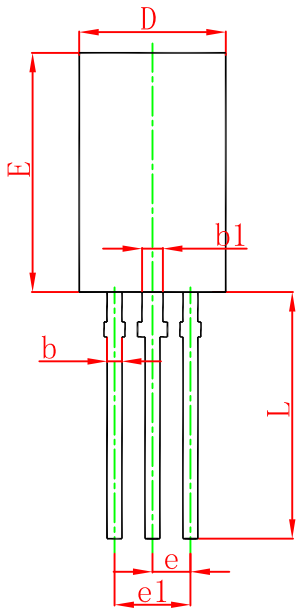
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= -1mA , I_E=0	-30			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	I_C= -10mA ,I_B=0	-30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= -1mA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -30V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V, I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}=-2V, I_C= -500mA	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= -1.5 A, I_B= -0.03A			-2	V
Base-emitter voltage	V_{BE}	I_C= -500mA,V_{CE}=-2V			-1	V
Transition frequency	f_T	V_{CE}= -2V, I_C=-500mA		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz			30	pF

CLASSIFICATION OF h_{FE}

Rank	**O**	**Y**
Range	100-200	160-320

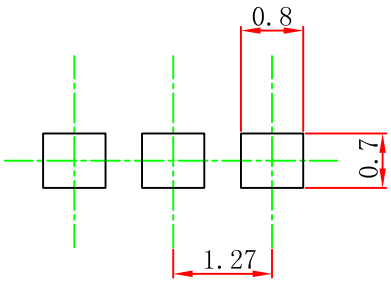
TO-92L Package Outline Dimensions





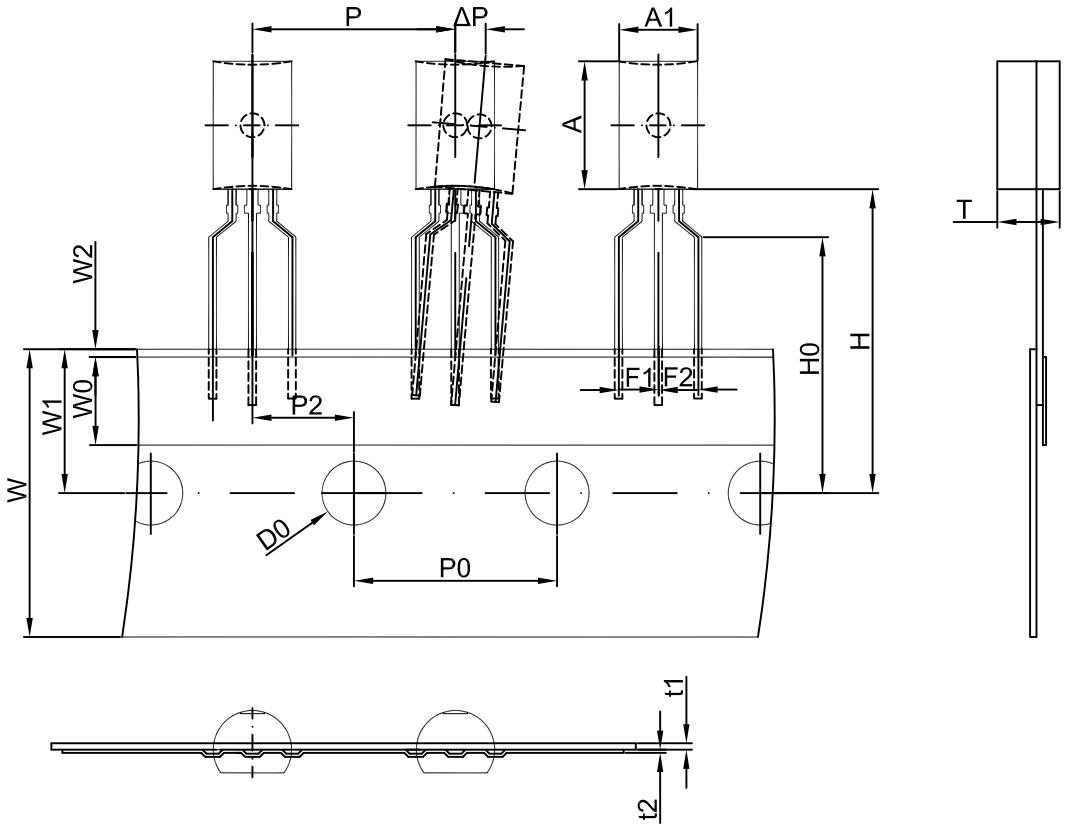
Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	3.750	4.050	0.148	0.159
A1	1.280	1.580	0.050	0.062
b	0.380	0.550	0.015	0.022
b1	0.620	0.780	0.024	0.031
c	0.350	0.450	0.014	0.018
D	4.750	5.050	0.187	0.199
D1	4.000		0.157	
E	7.850	8.150	0.309	0.321
e	1.270 TYP.		0.050 TYP.	
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

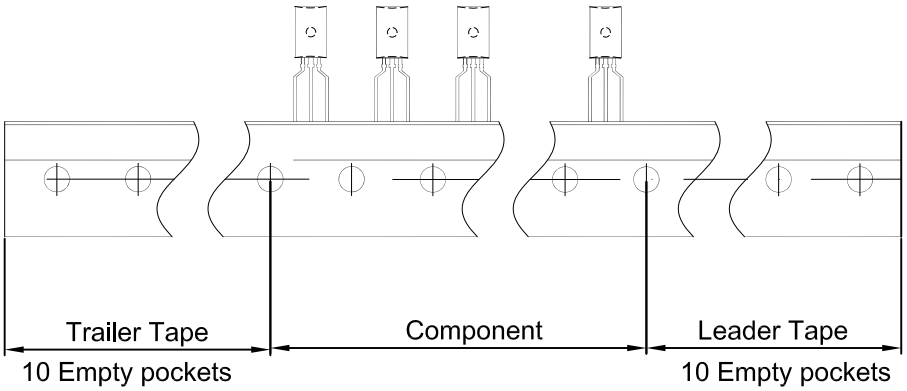


Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

TO-92L PACKAGE TAPING DIMENSION



Dimiensions 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