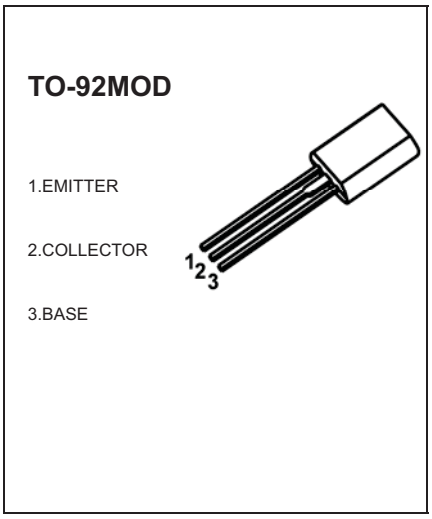
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD.

TO-92MOD Plastic-Encapsulate Transistors

2SC1383
2SC1384

TRANSISTOR (NPN)



FEATURES

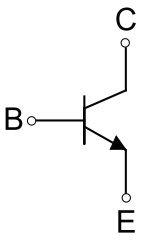
- Low Collector to Emitter Saturation Voltage $V_{CE(sat)}$.
- Complementary Pair with 2SA0683 and 2SA0684.

MARKING



C1383,C1384=Device code
Soliddot = Green molding compound device, if none, the normal device
XXX=Code

Equivalent Circuit



ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
2SC1383/2SC1384	TO-92MOD	Bulk	500pcs/Bag
2SC1383-TA/2SC1384-TA	TO-92MOD	Tape	2000pcs/Bo(

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	2SC1383	2SC1384	Unit
V_{CBO}	Collector-Base Voltage	30	60	V
V_{CEO}	Collector-Emitter Voltage	25	50	V
V_{EBO}	Emitter-Base Voltage	5		V
I_C	Collector Current	1		A
P_C	Collector Power Dissipation	1		W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125		℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150		℃

ELECTRICAL CHARACTERISTICS

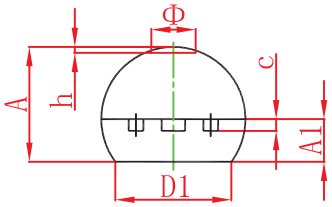
T_a=25℃ unless otherwise specified

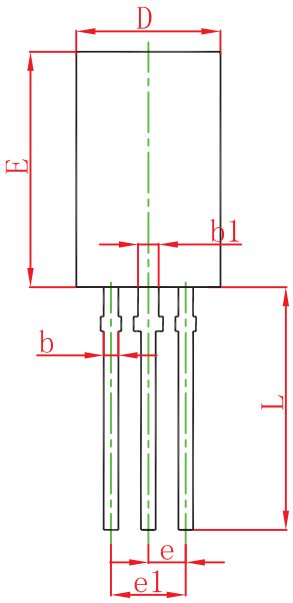
Parameter	Symbol	Test conditions	Min	T1!	Max	Unit
Collector-base breakdown voltage 2SC1383 **2SC1384**	$V_{(BR)CBO}$	I_C=10μA ,I_E=0	30 60			V
Collector-emitter breakdown voltage 2SC1383 **2SC1384**	$V_{(BR)CEO}$	I_C=2mA , I_B=0	25 50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= 10μA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=20V, I_E=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=10V, I_C=500mA	85		340	
	$h_{FE(2)}$	V_{CE}=5V, I_C=1A	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=500m A,I_B=50mA			0.4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=500mA,I_B=50mA			1.2	V
Transition frequency	f_T	V_{CE}=10V,I_C=50mA		200		MHz

CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	85-170	120-240	170-340

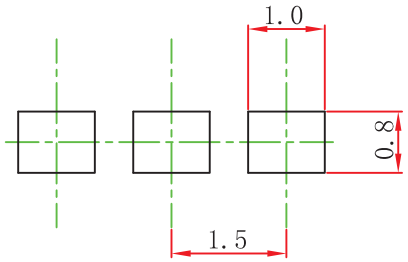
TO-92MOD Package Outline Dimensions





Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	4.800	5.000	0.189	0.197
A1	1.730	2.030	0.068	0.080
b	0.440	0.600	0.017	0.024
b1	0.940	1.100	0.037	0.043
c	0.350	0.450	0.014	0.018
D	5.900	6.100	0.232	0.240
D1	4.000		0.157	
E	8.500	8.700	0.335	0.343
e	1.500 TYP.		0.059 TYP.	
e1	2.900	3.100	0.114	0.122
L	13.800	14.200	0.543	0.559
Φ		1.600		0.063
h	0.000	0.380	0.000	0.015

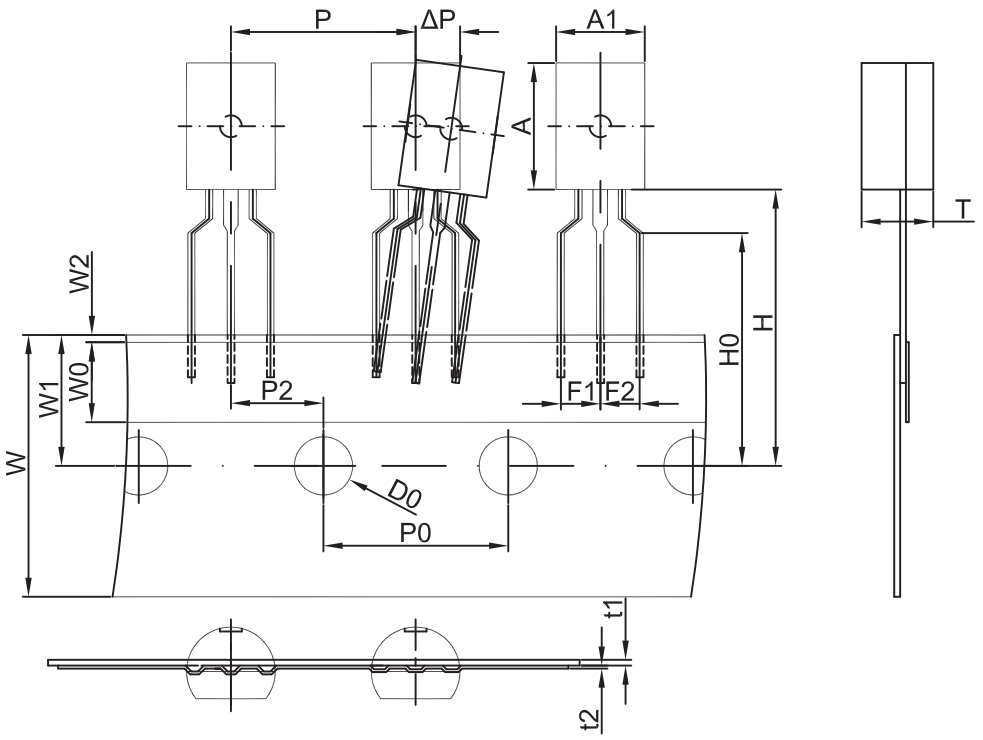
TO-92MOD Suggested Pad Layout



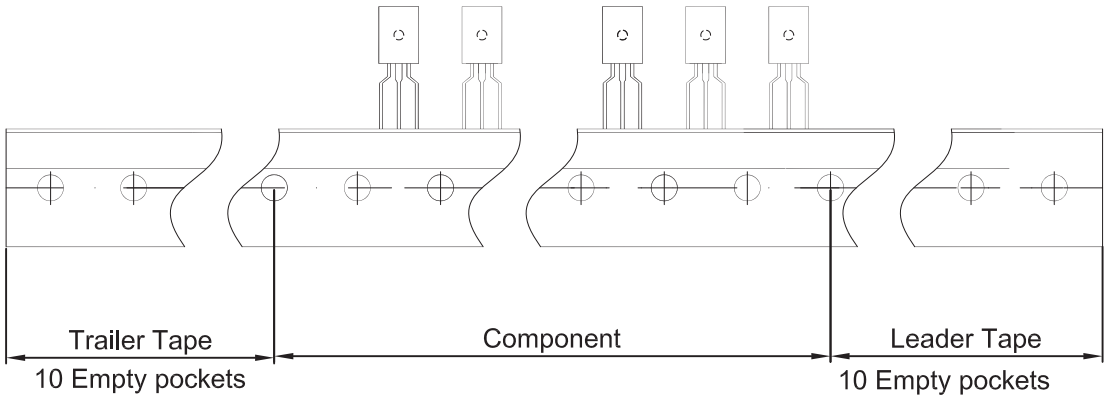
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:±0.05mm.
3.The pad layout is for reference purposes only.

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

TO-92MOD PACKAGE TAPING DIMENSION



Dimiensions are in millimeter								
A1	A	T	P	P0	P2	F1	F2	W
6.0	8.6	4.9	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-92MOD	2000 pcs	333×245×43	20,000 pcs	573×404×266