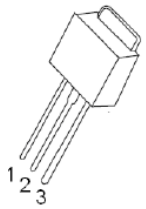
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD

JSCJ TO-251-3L Plastic-Encapsulate Transistors

MJD32C TRANSISTOR (PNP)

TO-251-3L



1.BASE

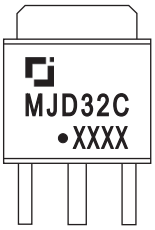
2.COLLECTOR

3.EMITTER

FEATURES

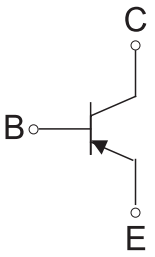
- Designed for General Purpose Amplifier and Low Speed Switching Applications
- Lead Formed for Surface Mount Applications in Plastic Sleeves (No Suffix)
- Straight Lead Version in Plastic Sleeves ("–1" Suffix)
- Lead Formed Version in 16 mm Tape and Reel ("T4" Suffix)
- Electrically Similar to Popular TIP31 and TIP32 Series

MARKING



MJD32C=Device code
Solid dot=Green moldinn compound device,
if none,the normal device
XXXX=Code

Equivalent Circuit



MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-3	A
P_C	Collector Power Dissipation	1.25	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

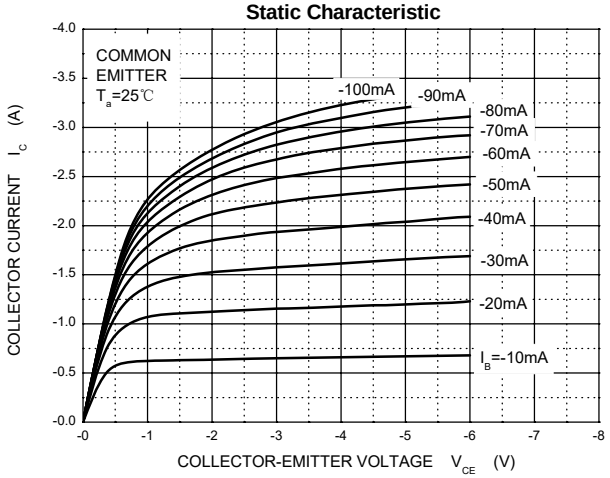
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -1mA, I_E=0	-100		V
Collector-emitter breakdown voltage *	$V_{CEO(sus)}$	I_C= -30mA, I_B=0	-100		V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -1mA, I_C=0	-5		V
Collector cut-off current	I_{CES}	V_{CE}=-100V, V_{EB}=0		-2	μA
Collector cut-off current	I_{CEO}	V_{CE}= -60V, I_B= 0		-5	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0		-1	mA
DC current gain	$h_{FE(1)}$	V_{CE}= -4V, I_C=-1A	25		
	$h_{FE(2)}$	V_{CE}=-4 V, I_C=-3A	15	75	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-3A, I_B=-0.375A		-1.2	V
Base-emitter voltage	$V_{BE(on)}$	V_{CE}= -4V, I_C=-3A		-1.8	V
Transition frequency	f_T	V_{CE}=-10V , I_C=-0.5A,f_T=1kHz	3		MHz

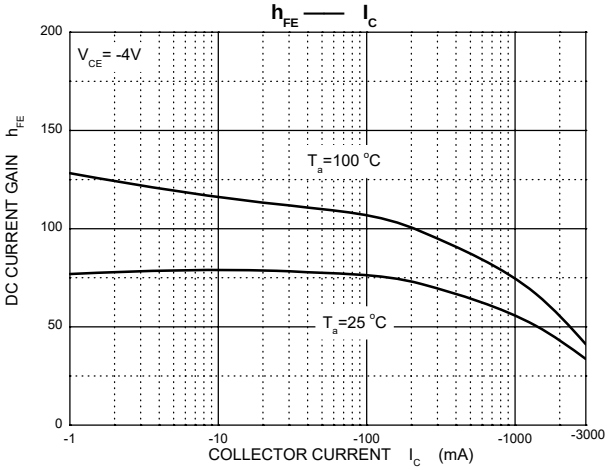
* Pulse Test: PW≤300μs, Duty Cycle≤2%.

Typical Characteristics

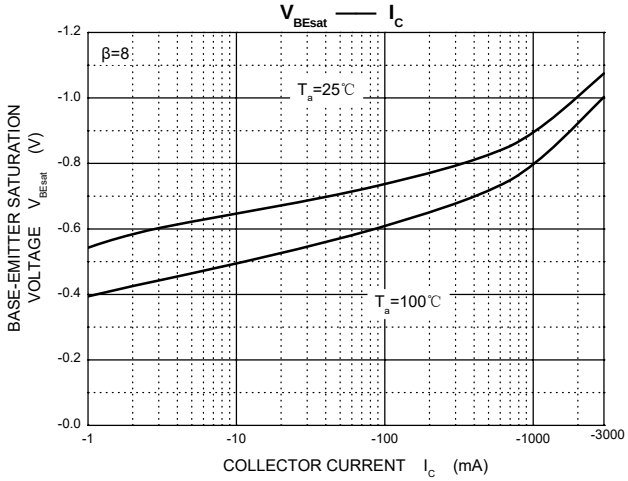
Static Characteristic



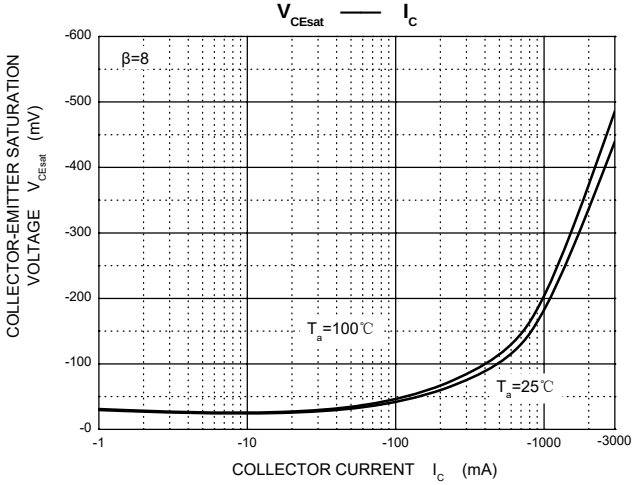
h_{FE} —— I_C



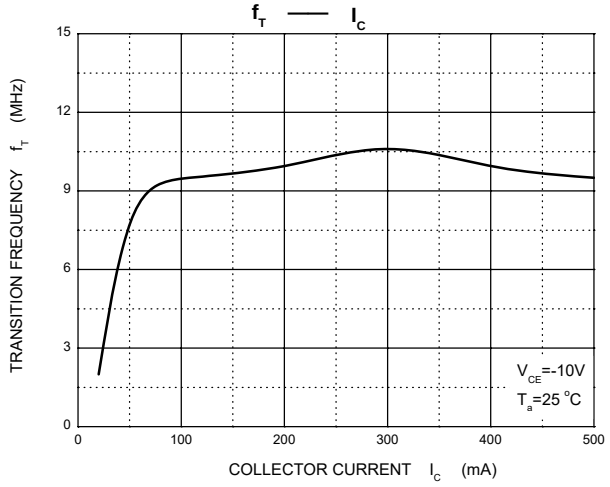
V_{BEsat} —— I_C



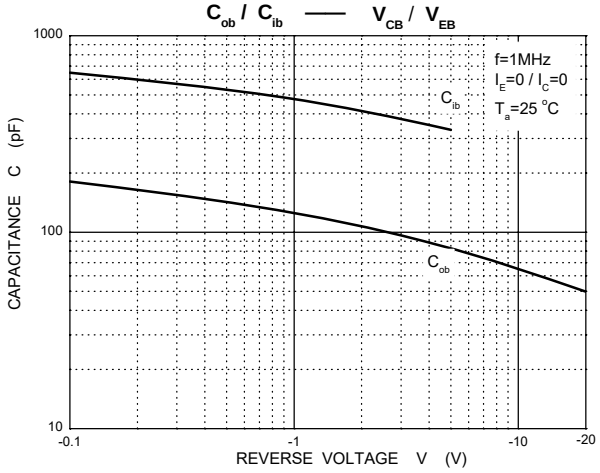
V_{CEsat} —— I_C



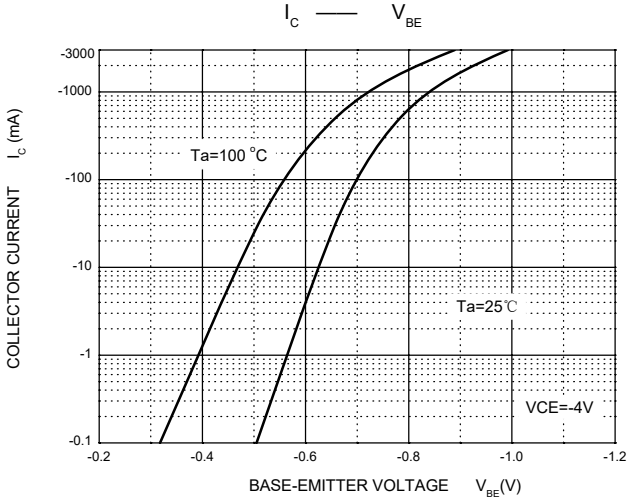
f_T —— I_C



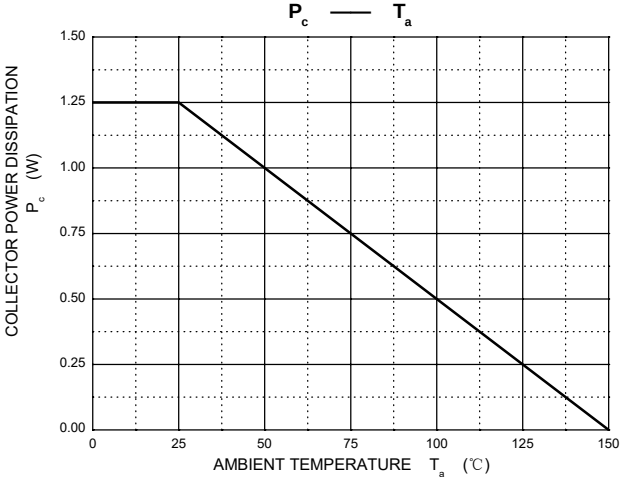
C_{ob} / C_{ib} —— V_{CB} / V_{EB}



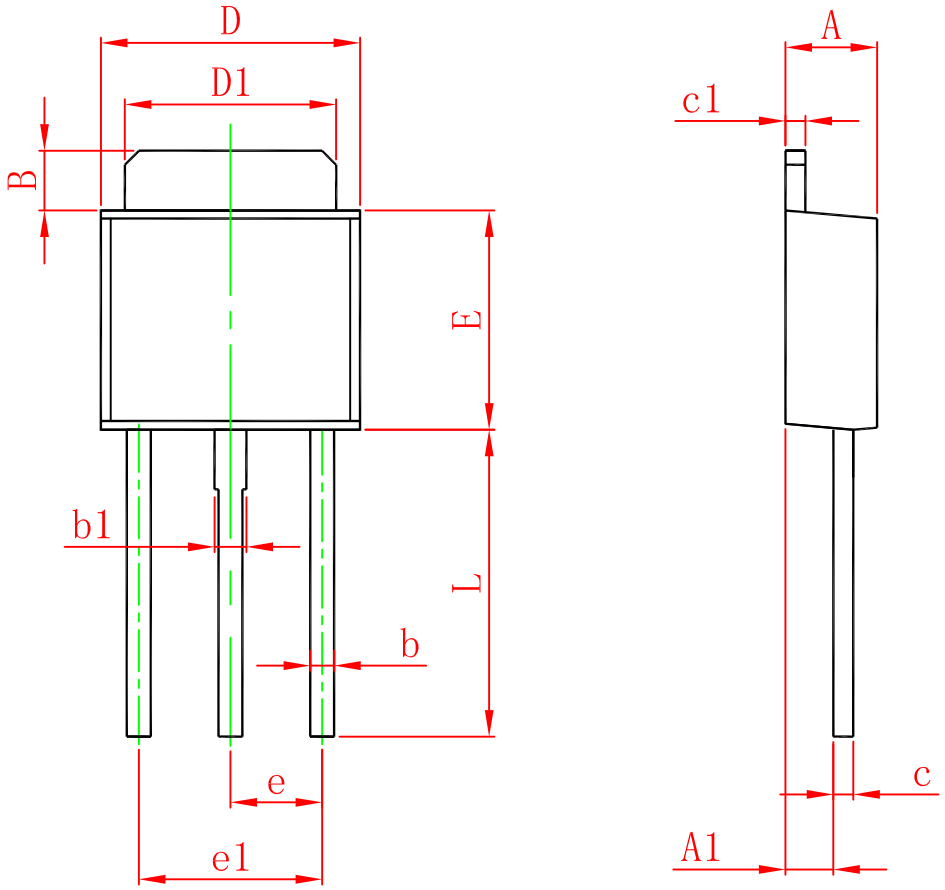
I_C —— V_{BE}



P_c —— T_a



TO-251-3L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	1.050	1.350	0.042	0.054
B	1.350	1.650	0.053	0.065
b	0.500	0.700	0.020	0.028
b1	0.700	0.900	0.028	0.035
c	0.430	0.580	0.017	0.023
c1	0.430	0.580	0.017	0.023
D	6.350	6.650	0.250	0.262
D1	5.200	5.400	0.205	0.213
E	5.400	5.700	0.213	0.224
e	2.300 TYP.		0.091 TYP.	
e1	4.500	4.700	0.177	0.185
L	7.500	7.900	0.295	0.311