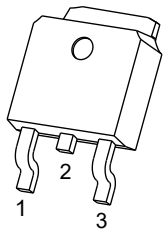
JIANGSU CHANGJING ELECTRONICS TECHNOLOGY CO., LTD.

JSCJ TO-252-2L Plastic-Encapsulate Transistors

MJD3055 TRANSISTOR (NPN)

TO-252-2L



1.BASE

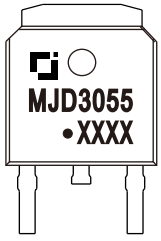
2.COLLECTOR

3.EMITTER

FEATURES

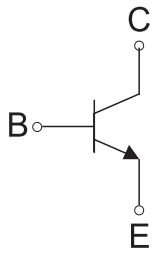
- Designed for General Purpose Amplifier and Low Speed Switching Applications
- Electrically Simiar to MJE3055
- DC Current Gain Specified to10 Amperes

MARKING



MJD3055=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	70	V
V_{CEO}	Collector-Emitter Voltage	60	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	10	A
I_{CP} ①	Collector Current	20	A
P_C	Collector Power Dissipation	1.25	W
T_J,T_{stg}	Operating Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

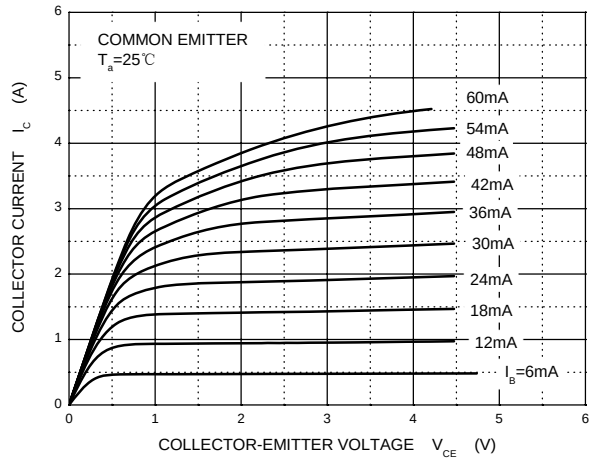
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	Ic=1mA,I_E=0	70			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	Ic=200 mA,I_B=0	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=1mA,I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}=70V,I_E=0			0.02	mA
	I_{CEO}	V_{CB}=30V,I_B=0			50	μA
Emitter cut-off current	I_{EBO}	V_{EB}=5V,I_C=0			0.5	mA
DC current gain	$h_{FE(1)}$	V_{CE}=4V,I_C=4A	20		100	
	$h_{FE(2)}$	V_{CE}=4V,I_C=10A	5			
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$	I_C=4A, I_B=0.4A			1.1	V
	$V_{CE(sat)(2)}$	I_C=10A, I_B=3.3A			8	V
Base-emitter voltage	V_{BE}	V_{CE}=4V, I_C=4A			1.8	V
Transition frequency	f_T	V_{CE}=10V,I_C=0.5A,f=500KH_Z	2			MHz

Notes:

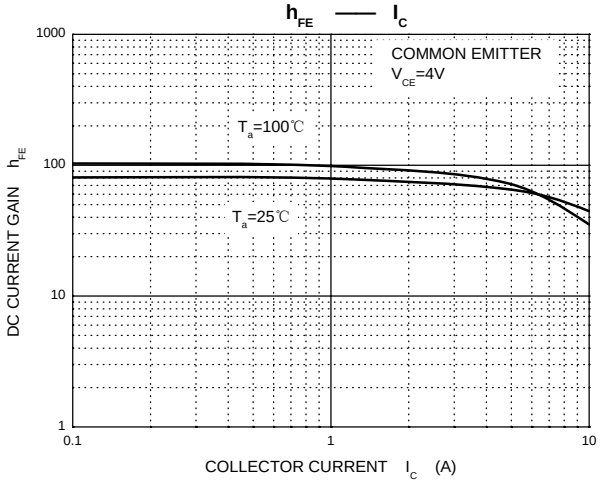
1.Pw=10ms Single Pulse

Typical Characteristics

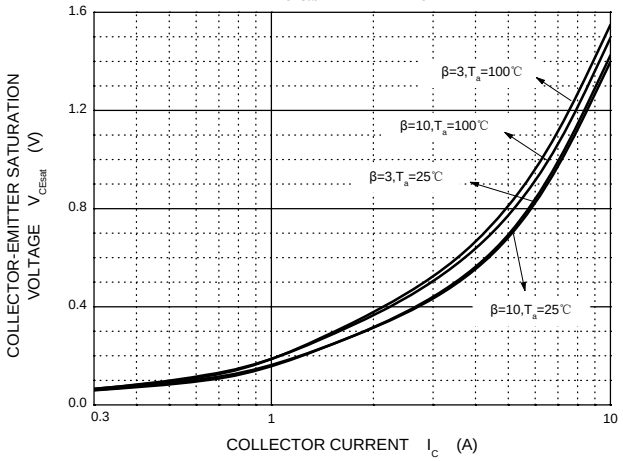
Static Characteristic



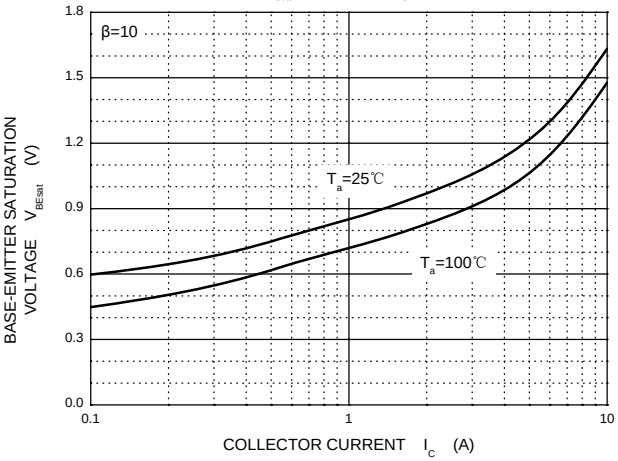
h_{FE} —— I_C



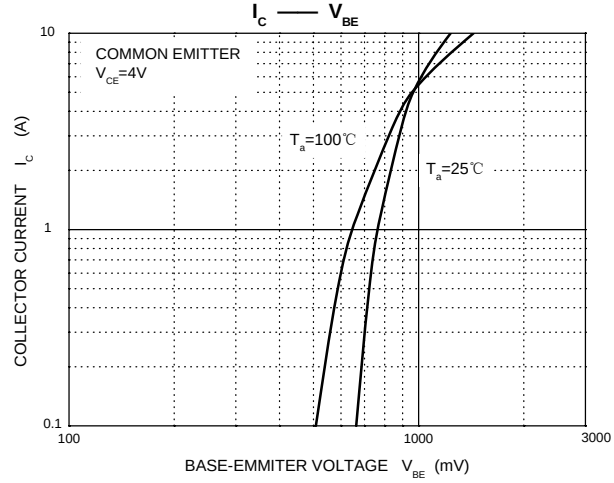
V_{CEsat} —— I_C



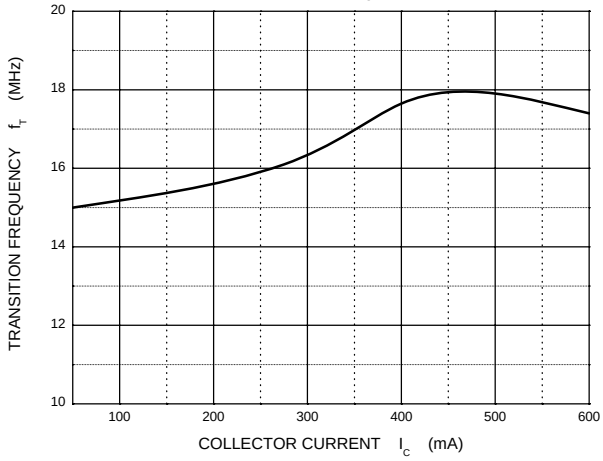
V_{BEsat} —— I_C



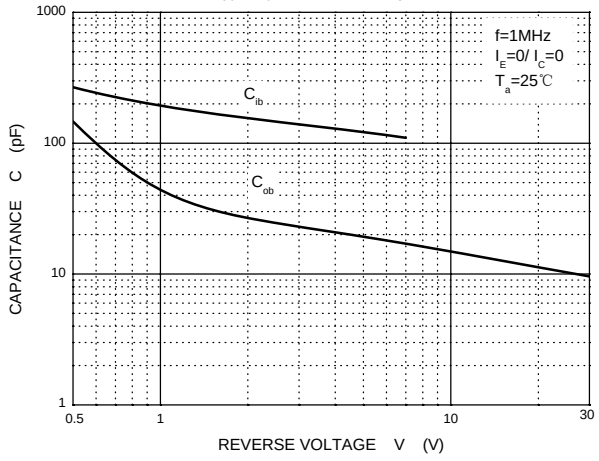
I_C —— V_{BE}



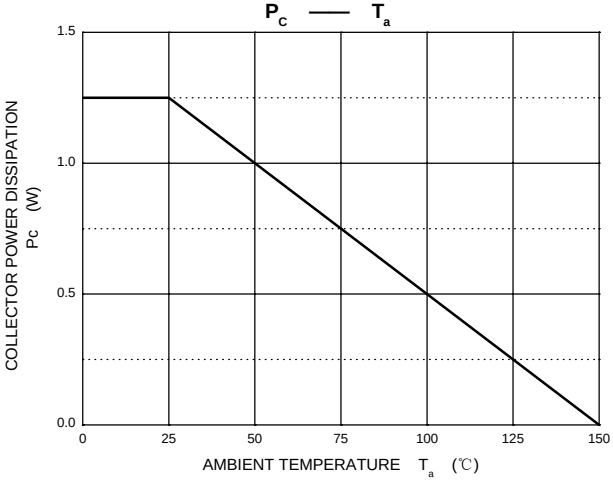
f_T —— I_C



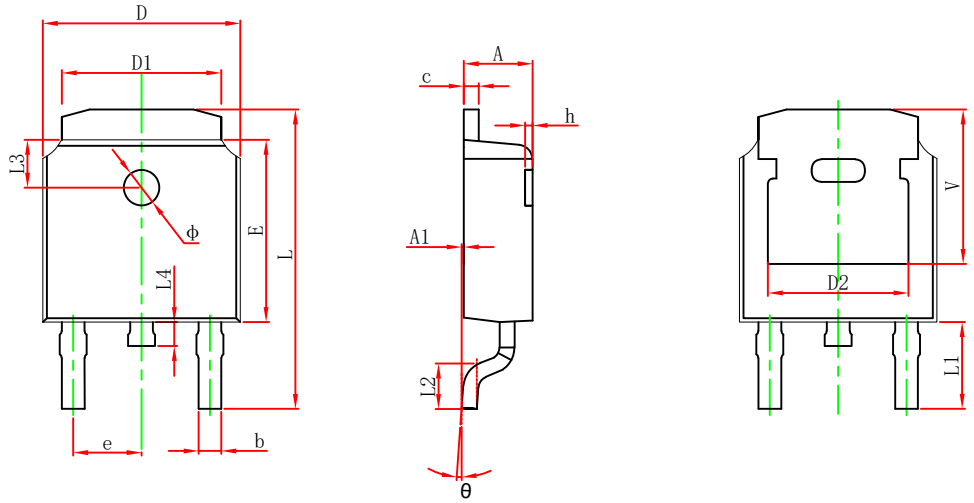
C_{ob}/ C_{ib} —— V_{CB}/ V_{EB}



P_C —— T_a

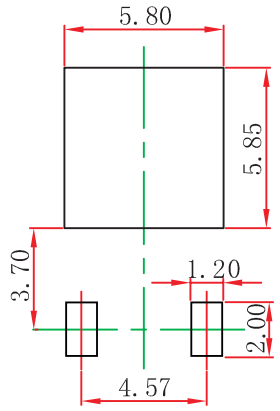


TO-252-2L Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	2.200	2.400	0.087	0.094
A1	0.000	0.127	0.000	0.005
b	0.635	0.770	0.025	0.030
c	0.460	0.580	0.018	0.023
D	6.500	6.700	0.256	0.264
D1	5.100	5.460	0.201	0.215
D2	4.830 REF.		0.190 REF.	
E	6.000	6.200	0.236	0.244
e	2.186	2.386	0.086	0.094
L	9.712	10.312	0.382	0.406
L1	2.900 REF.		0.114 REF.	
L2	1.400	1.700	0.055	0.067
L3	1.600 REF.		0.063 REF.	
L4	0.600	1.000	0.024	0.039
Φ	1.100	1.300	0.043	0.051
θ	0°	8°	0°	8°
h	0.000	0.300	0.000	0.012
V	5.250 REF.		0.207 REF.	

TO-252-2L Suggested Pad Layout



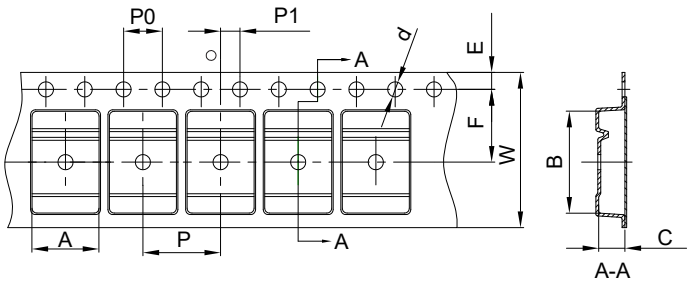
Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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-252-2L Tape and Reel

TO-252-2L Embossed Carrier Tabe

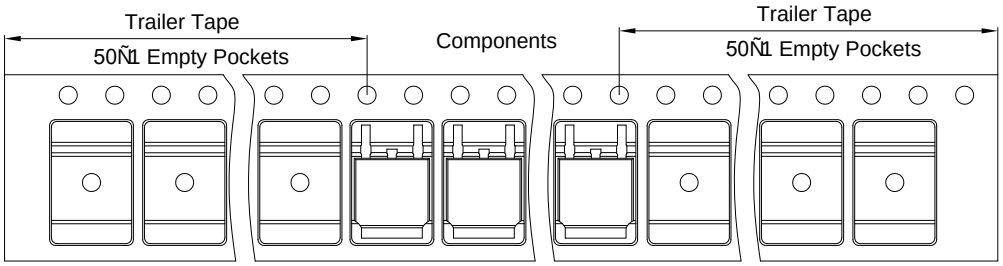


Packaging Description:

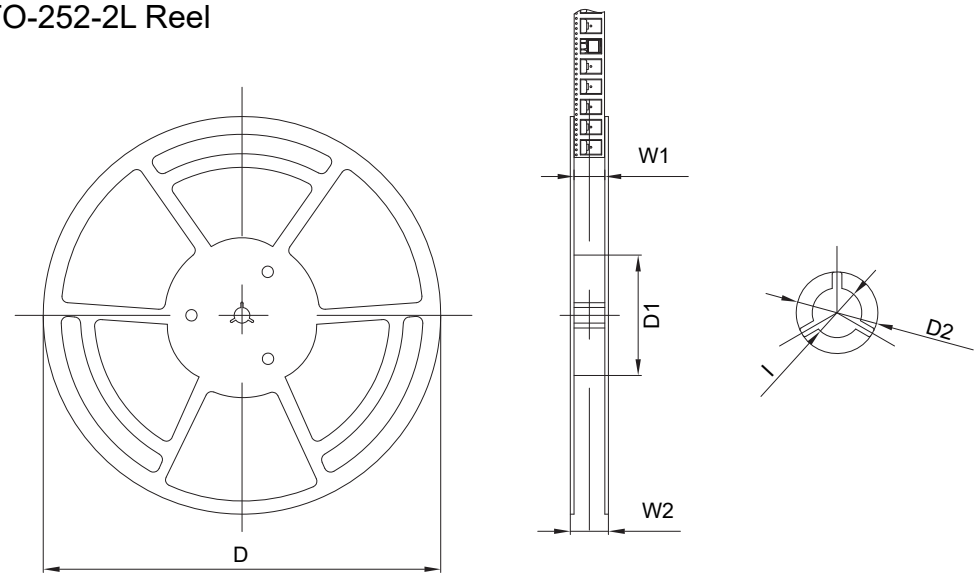
TO-252-2L parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Hear Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 2500 units per 13″ or 33.0 cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
TO-252	6.90	10.50	2.70	Φ1.55	1.75	7.50	4.00	8.00	2.00	16.00

TO-252-2L Tape Leader and Trailer



TO-252-2L Reel



Dimensions are in millimeter						
Reel	D	D1	D2	W1	W2	I
13" Dia	330.00	100.00	Φ21.00	16.40	21.40	Φ13.00

Reel	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)
2500 pcs	13 inch	5000 pcs	360×360×65	25000 pcs	378×358×382