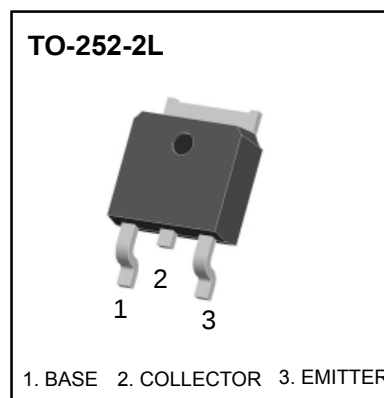


TO-252-2L Plastic-Encapsulate Transistors

TRANSISTOR (NPN)

Feature

- Designed for General Purpose Amplifier and Low Speed S 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 TIP41 and TIP42 Series
- Monolithic Construction With Built-in Base-Emitter Resistors



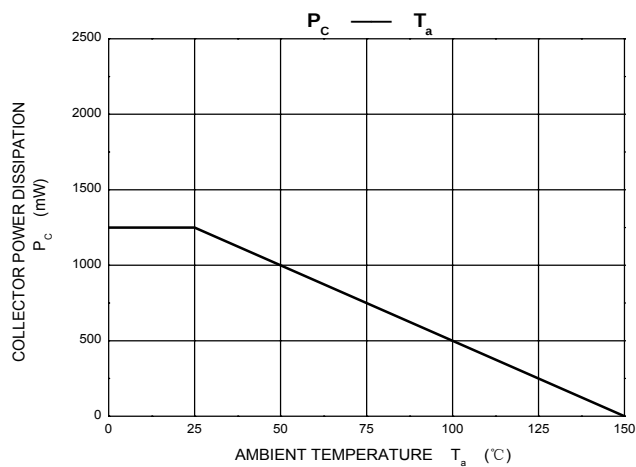
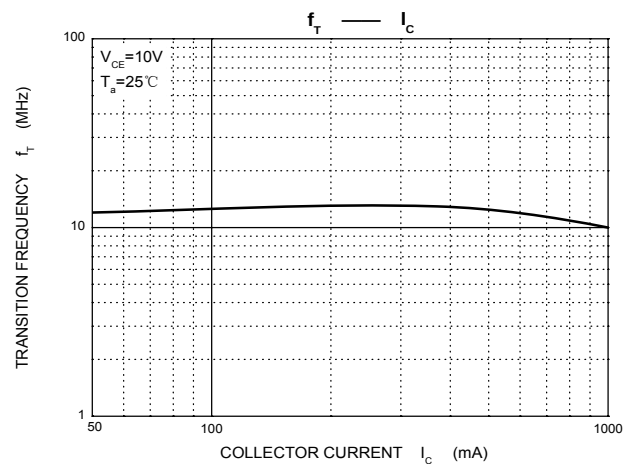
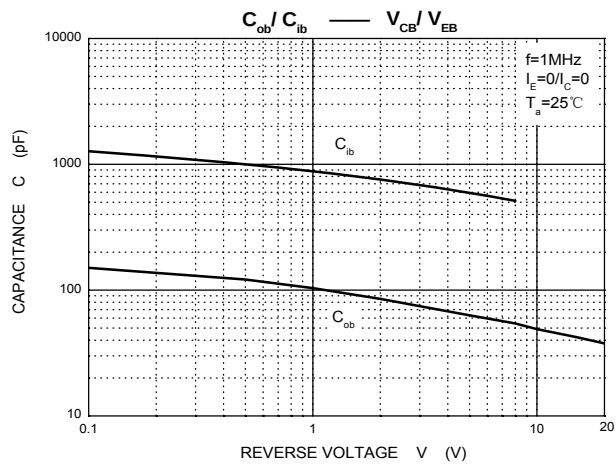
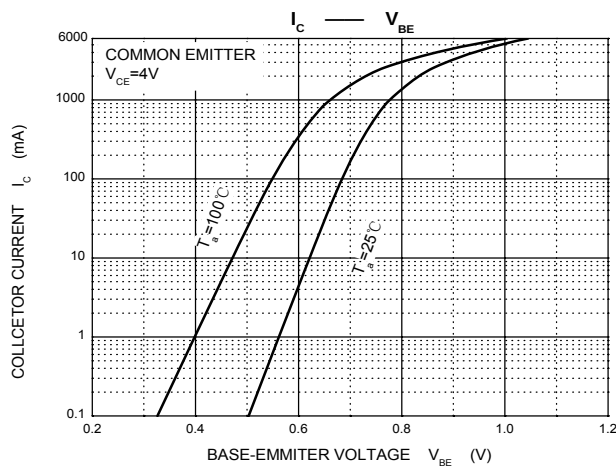
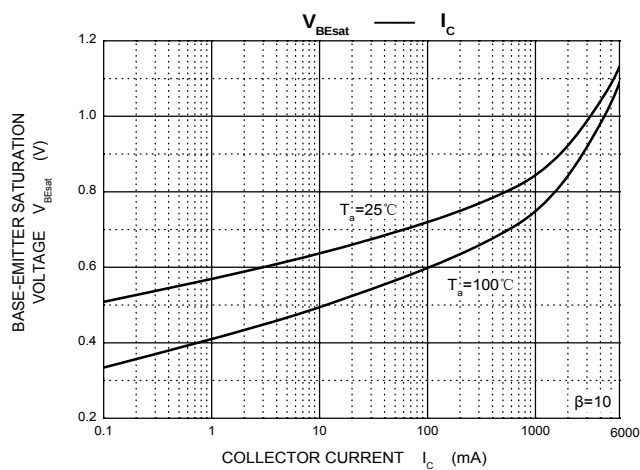
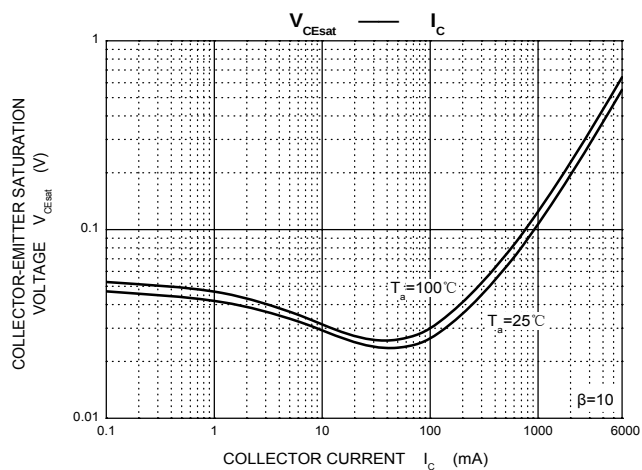
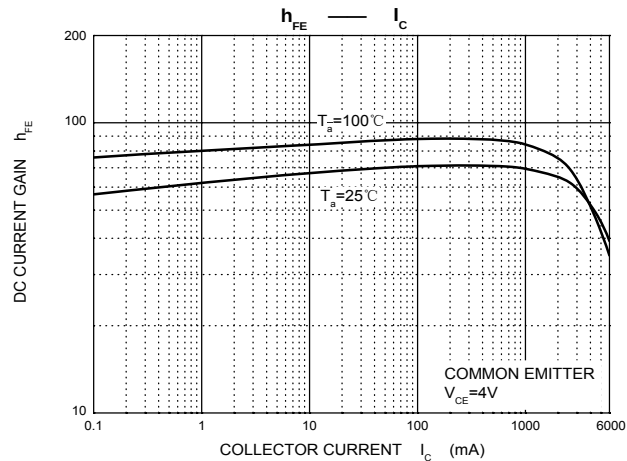
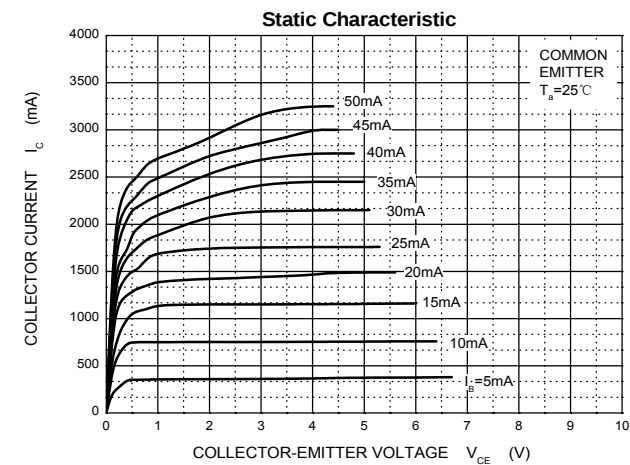
Limiting Values (Absolute Maximum Rating)

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	6	A
P_C	Collector Power Dissipation	1.25	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-65-150	°C

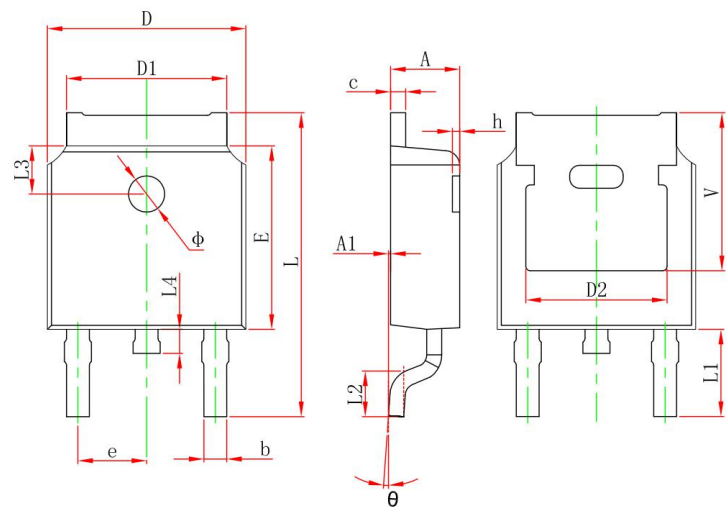
Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=100\mu\text{A}, I_E=0$	100			V
Collector-emitter breakdown voltage	$V_{CEO(sus)}$	$I_C=30\text{mA}, I_B=0$	100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=100\mu\text{A}, I_C=0$	5			V
Collector cut-off current	I_{CEO}	$V_{CB}=60\text{V}, I_E=0$			50	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5\text{V}, I_C=0$			0.5	mA
DC current gain	$h_{FE(1)}$	$V_{CE}=4\text{V}, I_C=0.3\text{A}$	30			
	$h_{FE(2)}$	$V_{CE}=4\text{V}, I_C=3\text{A}$	15		75	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C=6\text{A}, I_B=0.6\text{A}$			1.5	V
Base-emitter voltage	V_{BE}	$V_{CE}=4\text{V}, I_C=6\text{A}$			2	V
Transition frequency	f_T	$V_{CE}=10\text{V}, I_C=500\text{mA}, f=1\text{MHz}$	3			MHz

Typical Characteristics



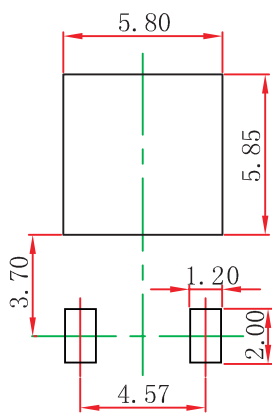
TO-252-2L Package Outline Dimensions



SYMBOL	MIN	MAX	SYMBOL	MIN	MAX
A	2.20	2.40	L1	2.90 REF	
A1	0.000	0.125	L2	1.40	1.70
b	0.66	0.86	L3	1.60 REF	
c	0.46	0.58	L4	0.60	1.00
D	6.50	6.70	Φ	1.10	1.30
D1	5.10	5.46	θ	0°	8°
D2	4.830 REF		h	0.00	0.30
E	6.00	6.20	V	5.35 REF	
e	2.186	2.386			
L	9.80	10.40			
Coplanar degrees	0	0.09			

Unit : mm

TO-252-2L Suggested Pad Layout



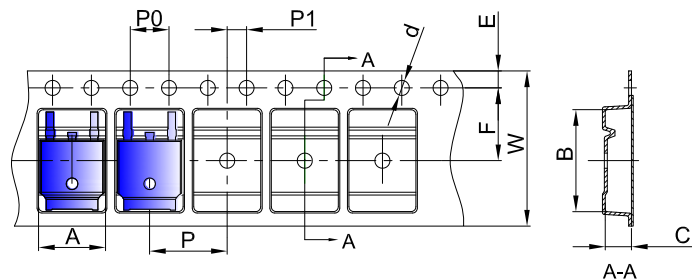
- Note:**
- 1. Controlling dimension: in millimeters.
 - 2. General tolerance: $\pm 0.05\text{mm}$.
 - 3. The pad layout is for reference purposes only.

NOTICE

JSJD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSJD 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 Embossed Carrier Tape

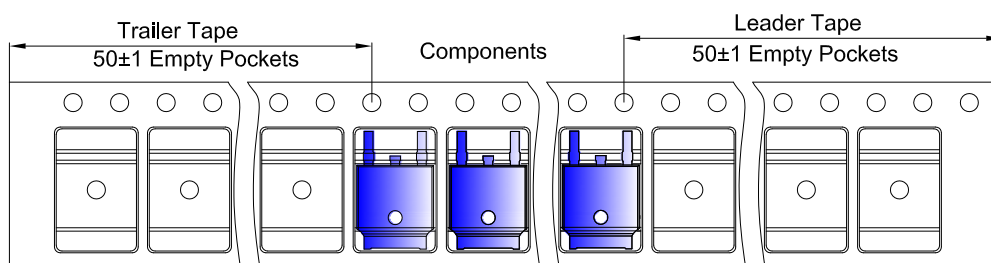


Packaging Description:

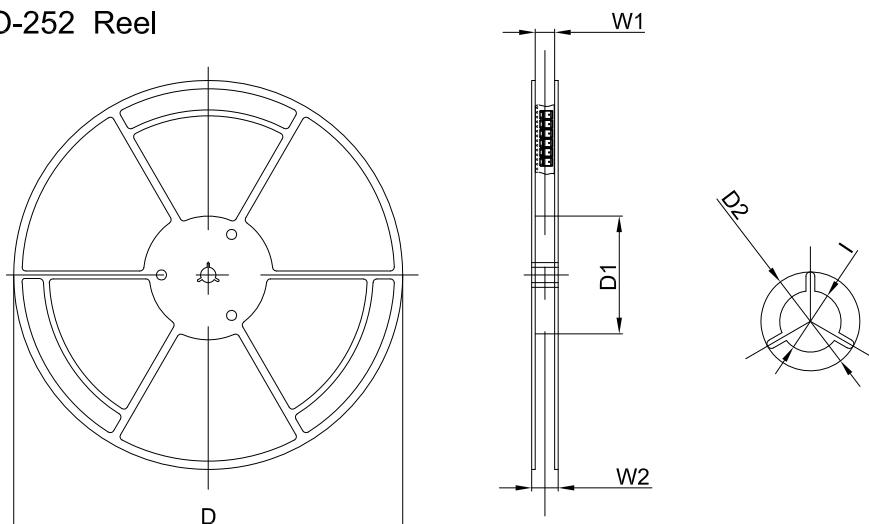
TO-252 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 25,00 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	Ø1.55	1.75	7.50	4.00	8.00	2.00	16.00

TO-252 Tape Leader and Trailer



TO-252 Reel



Dimensions are in millimeter						
Reel Option	D	D1	D2	W1	W2	I
13"Dia	330.00	100.00	Ø21.00	16.40	21.00	Ø13.00

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
2,500 pcs	13inch	2,500 pcs	340×336×29	25,000 pcs	353×346×365	