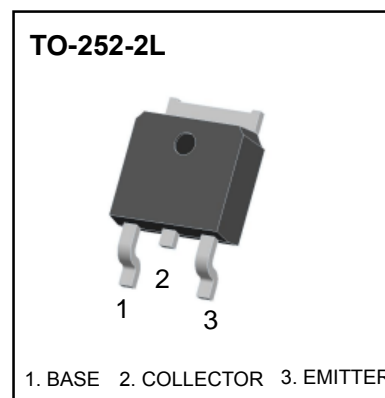


TO-252-2L Plastic-Encapsulate Transistors

TRANSISTOR (NPN)

Feature

- High DC Current Gain
- Electrically Similar to Popular TIP122
- Built-in a Damper Diode at E-C



Limiting Values (Absolute Maximum Rating)

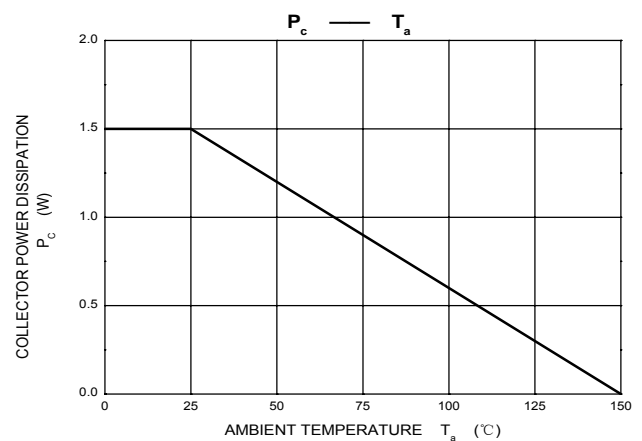
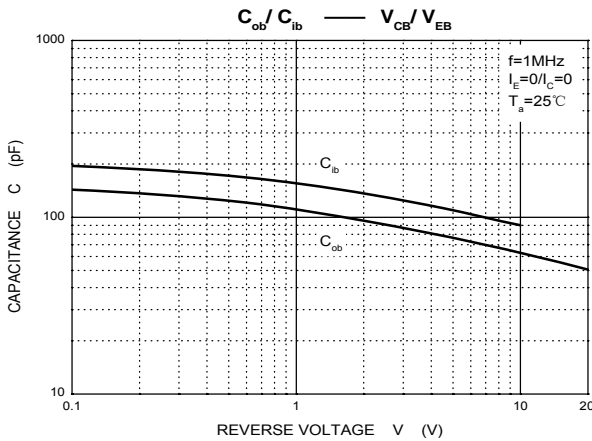
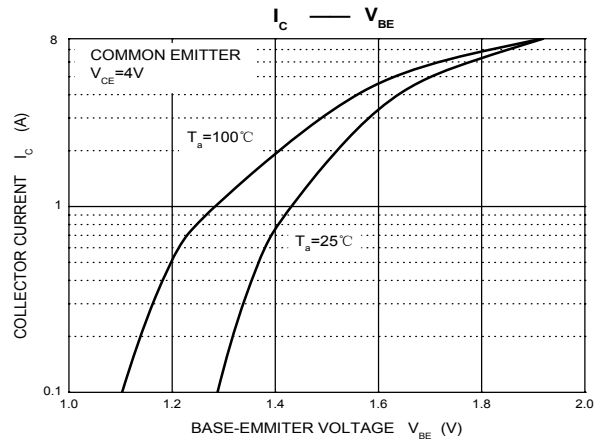
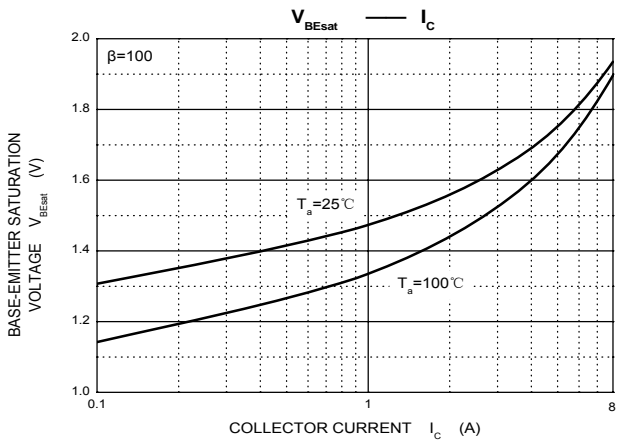
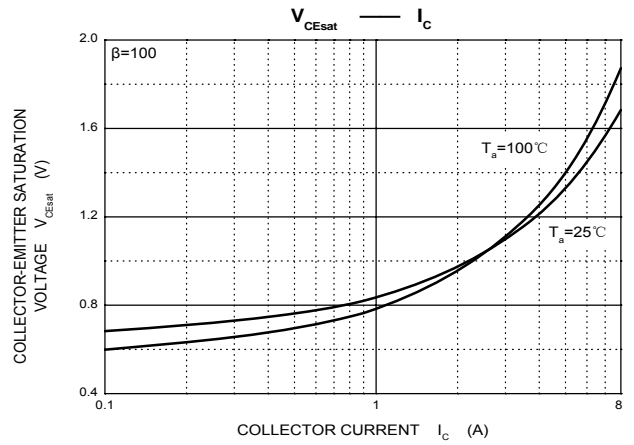
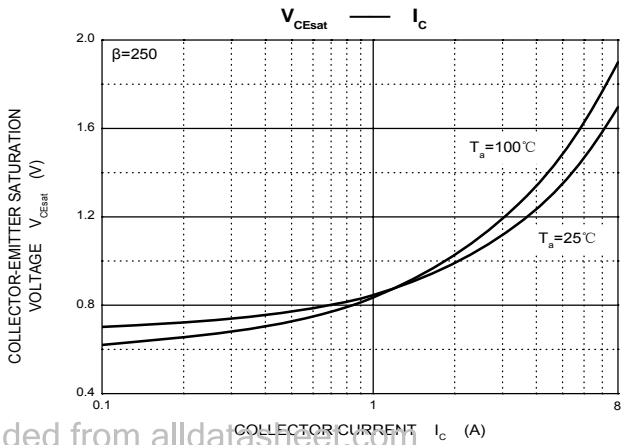
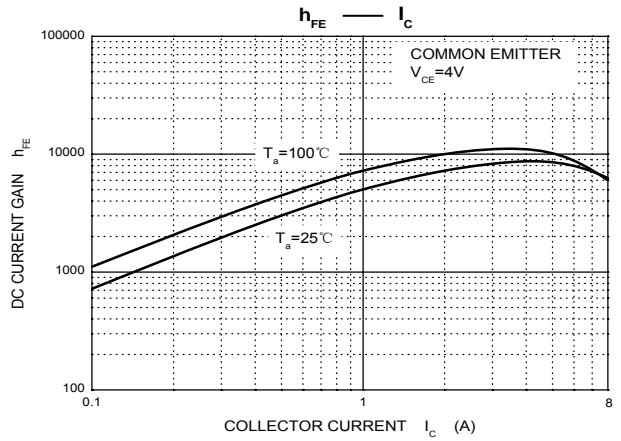
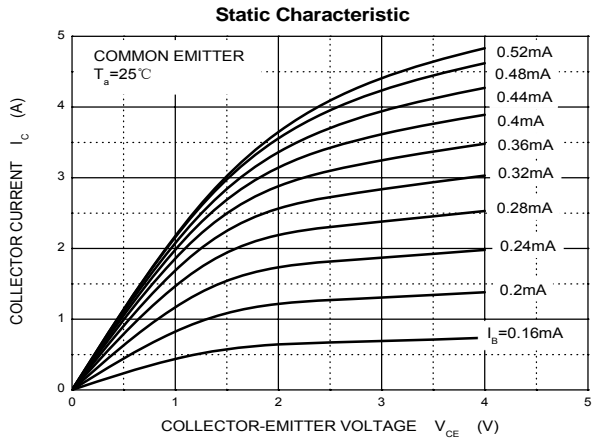
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	100	V
V_{CEO}	Collector-Emitter Voltage	100	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	8	A
P_C	Collector Power Dissipation	1.5	W
T_J	Junction Temperature	150	°C
T_{stg}	Storage Temperature	-55-150	°C

Downloaded from alldatasheet.com

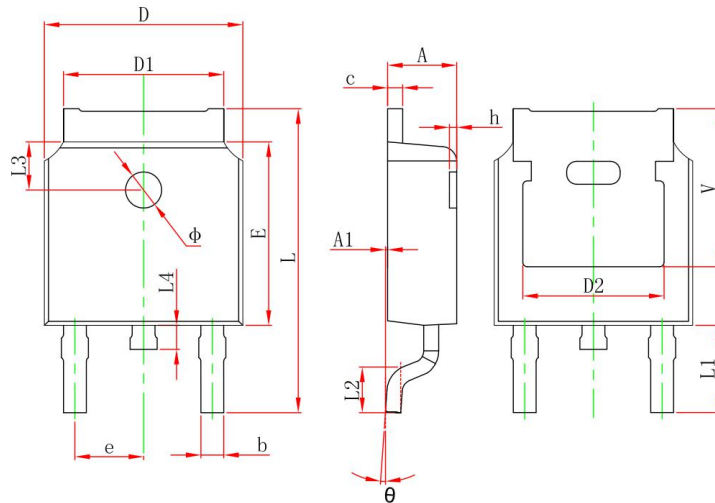
Electrical Characteristics (T=25°C Unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C=1mA, I_E=0$	100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C=30mA, I_B=0$	100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E=3mA, I_C=0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB}=100V, I_E=0$			10	μA
Collector-emitter cut-off current	I_{CEO}	$V_{CE}=50V, I_E=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}=5V, I_C=0$			2	mA
DC current gain	$h_{FE(2)}$	$V_{CE}=4V, I_C=4A$	1000		12000	
	$h_{FE(3)}$	$V_{CE}=4V, I_C=8A$	100			
Collector-emitter saturation voltage	$V_{CE(sat)1}$	$I_C=4A, I_B=16mA$			2	V
	$V_{CE(sat)2}$	$I_C=8A, I_B=80mA$			4	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C=8A, I_B=80mA$			4.5	V
Base-emitter voltage*	V_{BE}	$V_{CE}=4V, I_C=4A$			2.8	V
Collector output capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=0.1MHz$			200	pF

Typical Characteristics



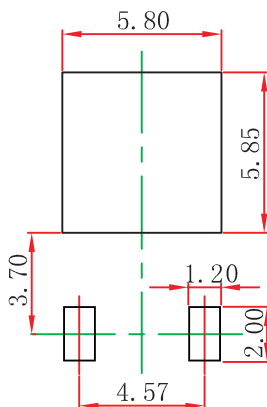
TO-252-2L Package Outline Dimensions



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					

Unit : mm

TO-252-2L Suggested Pad Layout



Note:

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

NOTICE

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