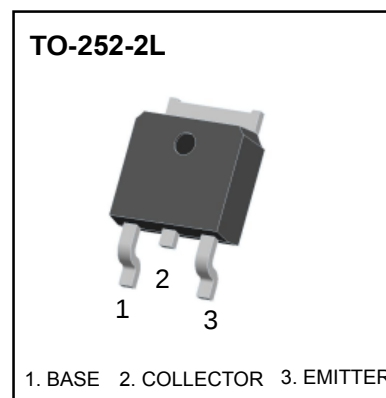


TO-252-2L Plastic-Encapsulate Transistors

TRANSISTOR (NPN)

Feature

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



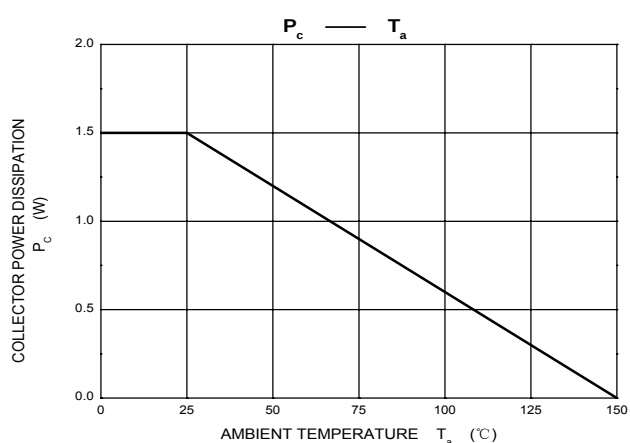
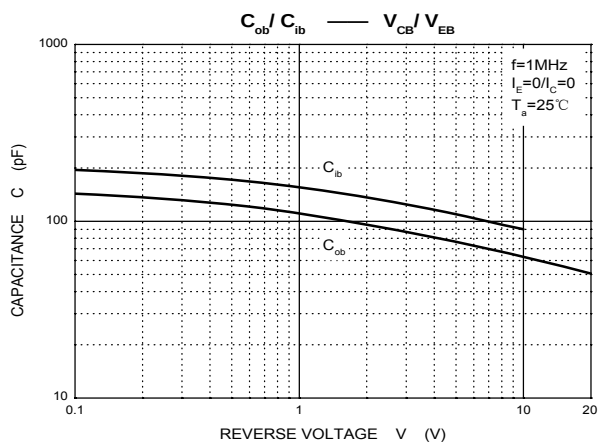
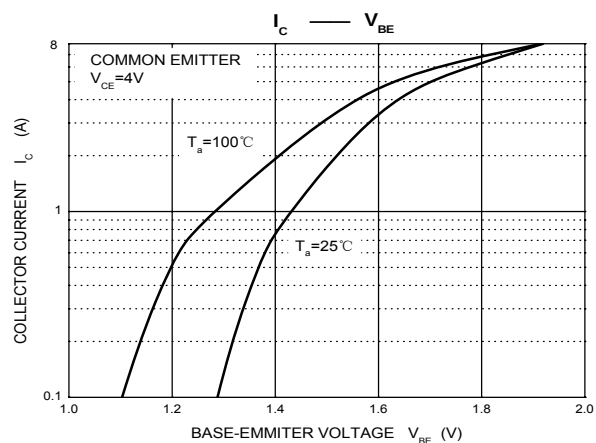
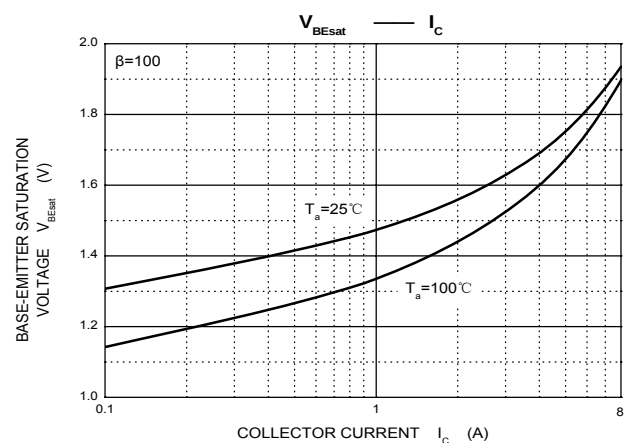
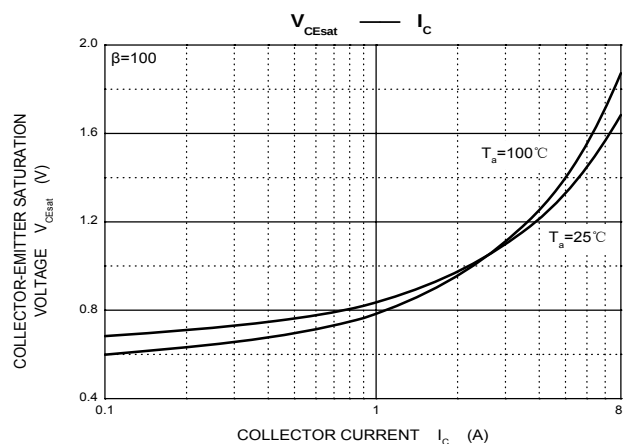
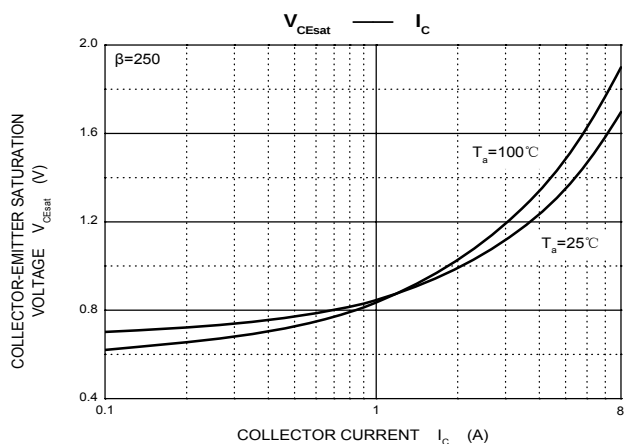
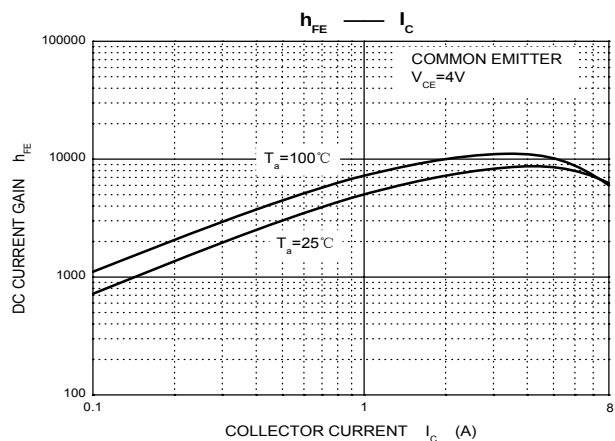
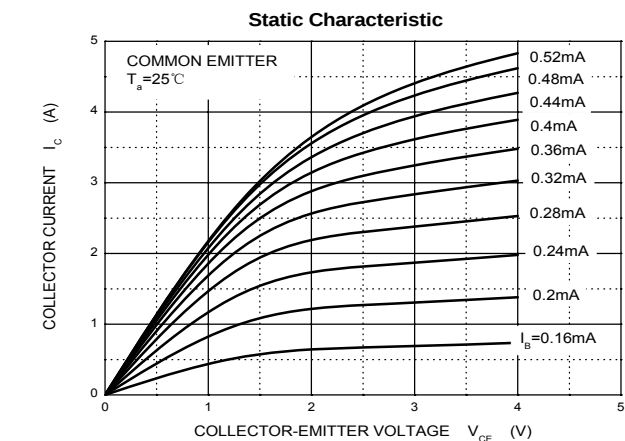
Limiting Values (Absolute Maximum Rating)

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

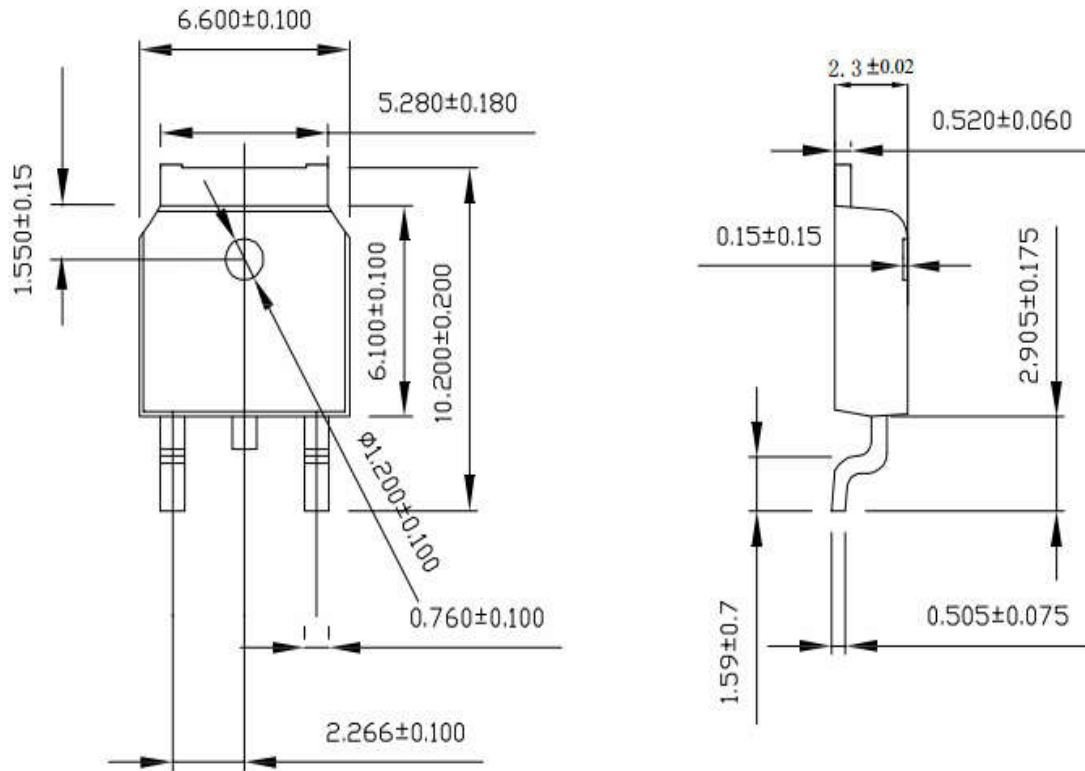
Electrical Characteristics (T=25°C Unless otherwise specified)

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

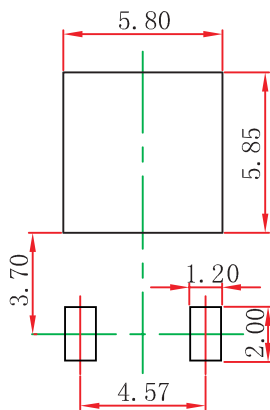
Typical Characteristics



TO-252-2L Package Outline Dimensions



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

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