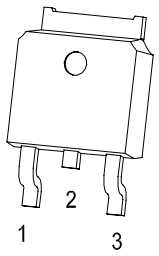
TO-252-2L Plastic-Encapsulate Transistors

TRANSISTOR (PNP)

FEATURES

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

TO-252-2L



1. BASE
2. COLLECTOR
3. EMITTER

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

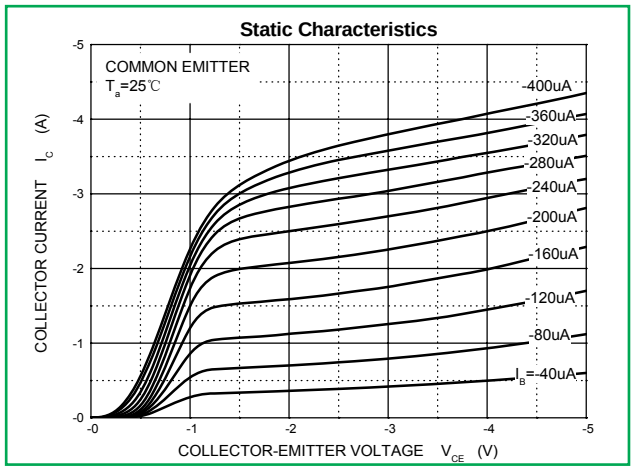
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-100	V
V_{CEO}	Collector-Emitter Voltage	-100	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-8	A
P_C	Collector Power Dissipation	1.5	W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

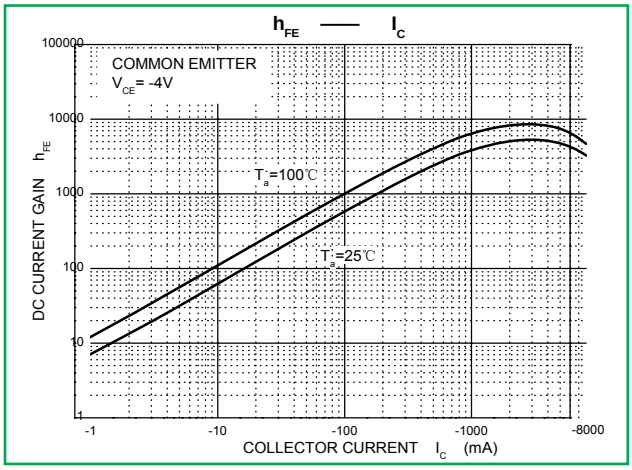
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

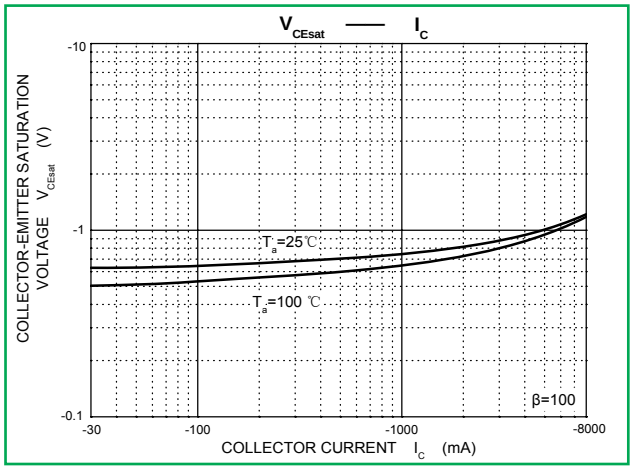
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-1mA,I_E=0	-100			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-30mA,I_B=0	-100			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-10mA,I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-100V,I_E=0			-10	μA
Collector-emitter cut-off current	I_{CEO}	V_{CE}=-50V,I_B=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V,I_C=0			-2	mA
DC current gain	$h_{FE(1)}$	V_{CE}=-4V,I_C=-4A	1000		12000	
	$h_{FE(2)}$	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			300	pF

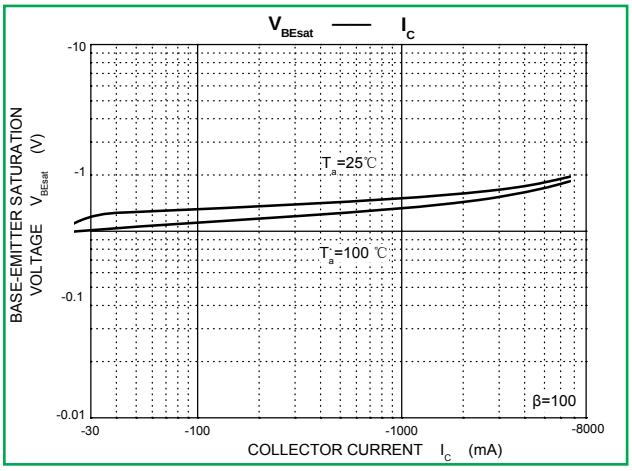
*Pulse Test: Pulse Width≤380μs, Duty Cycle≤2%

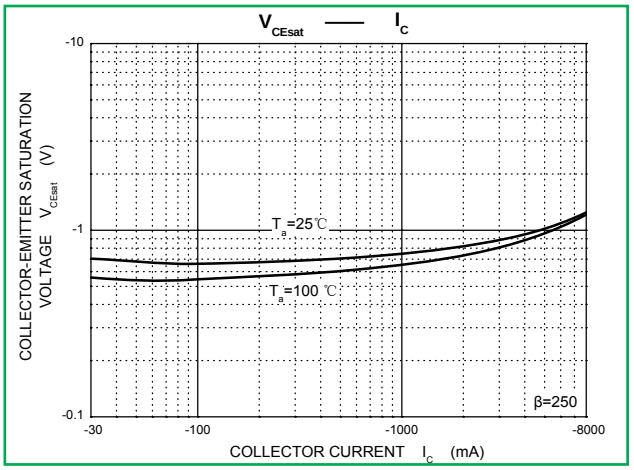
Typical Characteristics

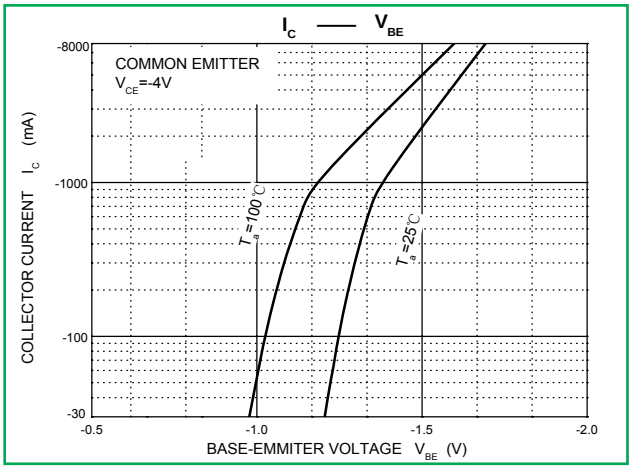


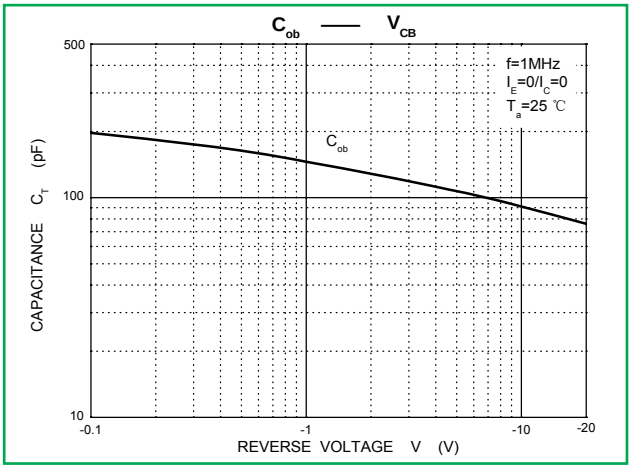


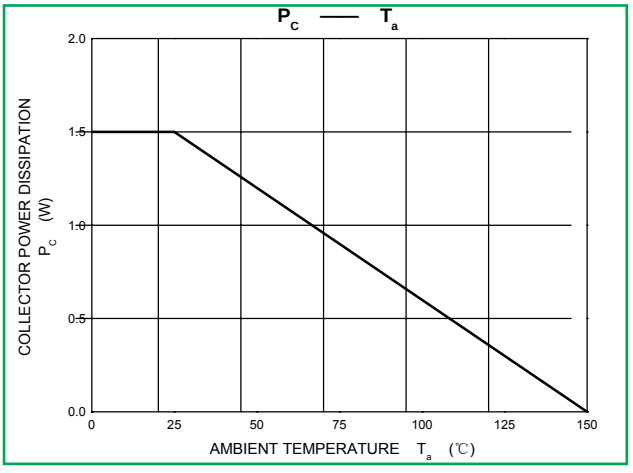




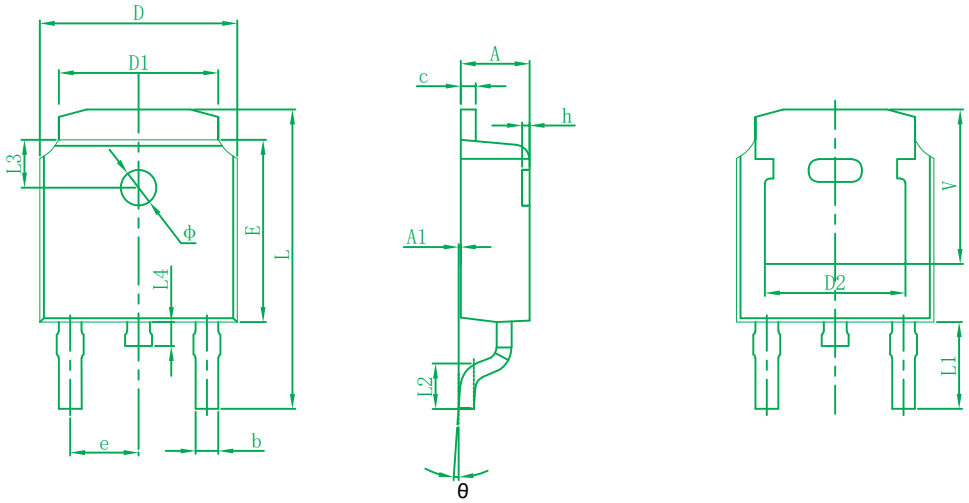






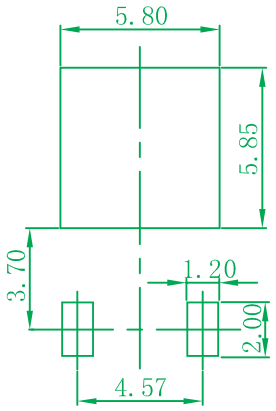


TO-252-2L Package Outline Dimensions



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.