



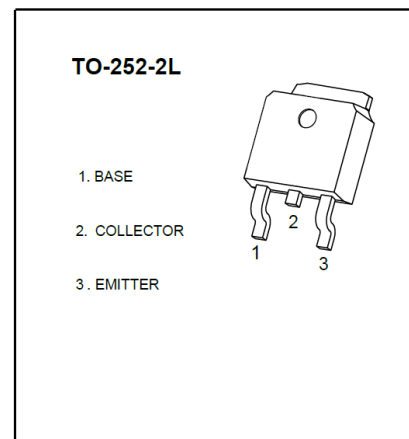
D882M

Plastic-Encapsulated Transistor

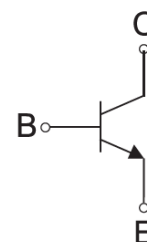
Transistor (NPN)

FEATURES

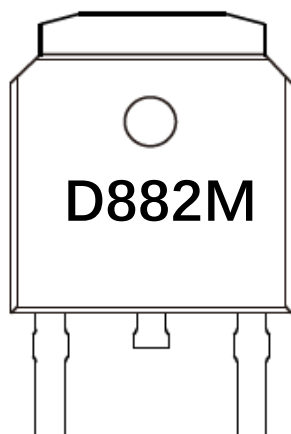
- Power dissipation



Equivalent Circuit



MARKING



**MAXIMUM RATINGS ($T_j = 25^{\circ}\text{C}$ unless otherwise specified)**

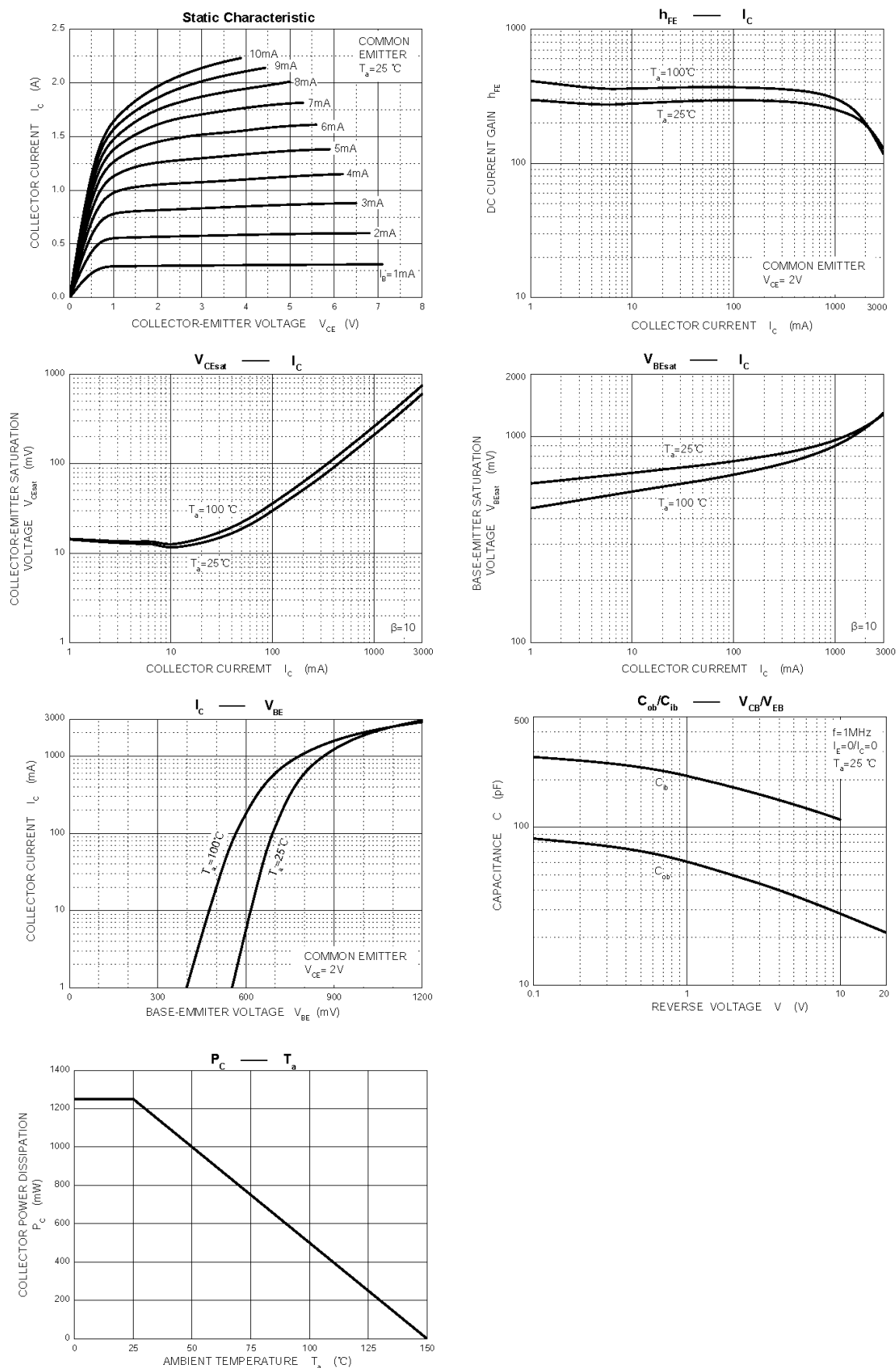
Parameter	Symbol	Value	Unit
Collector-base voltage	V_{CBO}	40	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	6	V
Collector continuous current	I_{C}	3	A
Collector power dissipation	P_{C}	1.25	W
Operating junction and storage temperature range	T_j, T_{stg}	-55 ~ 150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_j = 25^{\circ}\text{C}$ unless otherwise specified)

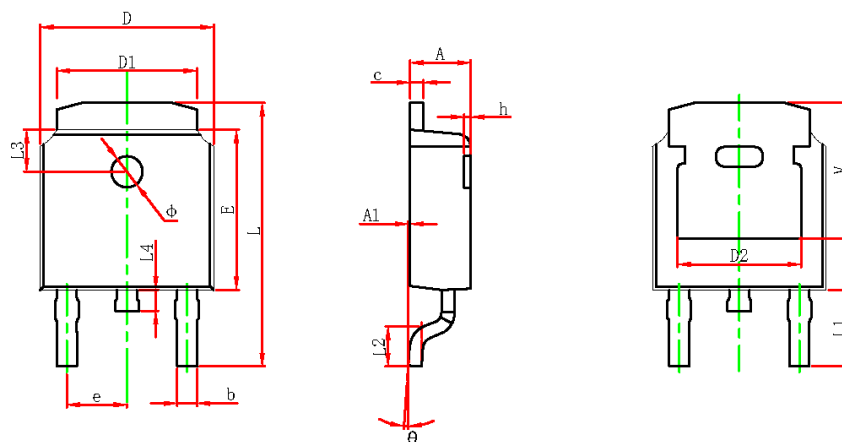
Parameter	Symbol	Test condition	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(\text{BR})\text{CBO}}$	$I_{\text{C}} = 100\mu\text{A}, I_{\text{E}} = 0\text{A}$	40	-	-	V
Collector-emitter breakdown voltage	$V_{(\text{BR})\text{CEO}}$	$I_{\text{C}} = 10\text{mA}, I_{\text{B}} = 0\text{A}$	30	-	-	V
Emitter-base breakdown voltage	$V_{(\text{BR})\text{EBO}}$	$I_{\text{E}} = 100\mu\text{A}, I_{\text{C}} = 0\text{A}$	6	-	-	V
Collector-base cut-off current	I_{CBO}	$V_{\text{CB}} = 40\text{V}, I_{\text{E}} = 0\text{A}$	-	-	1	μA
Collector cut-off current	I_{CEO}	$V_{\text{CE}} = 30\text{V}, I_{\text{E}} = 0\text{A}$	-	-	10	μA
Emitter-base cut-off current	I_{EBO}	$V_{\text{EB}} = 6\text{V}, I_{\text{C}} = 0\text{A}$	-	-	1	μA
DC current gain	h_{FE}	$V_{\text{CE}} = 2\text{V}, I_{\text{C}} = 1\text{A}$	60	-	400	-
Collector-emitter saturation voltage	$V_{\text{CE(sat)}}$	$I_{\text{C}} = 2\text{A}, I_{\text{B}} = 0.2\text{A}$	-	-	0.5	V
Base-emitter saturation voltage	$V_{\text{BE(sat)}}$	$I_{\text{C}} = 2\text{A}, I_{\text{B}} = 0.2\text{A}$	-	-	1.5	V
Transition frequency	f_{T}	$V_{\text{CE}} = 5\text{V}, I_{\text{C}} = 100\text{mA}, f = 10\text{MHz}$	-	90	-	MHz



TYPICAL CHARACTERISTICS

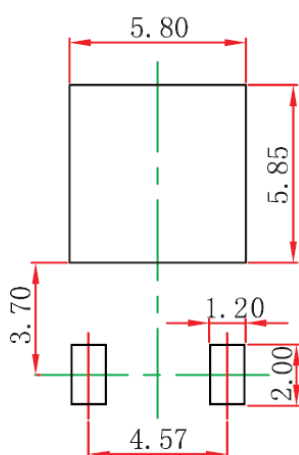


TO-252-2L PACKAGE OUTLINE DIMENSIONS



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: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purpose only.