

TO-252-2L Plastic-Encapsulate Transistors

D882M TRANSISTOR (NPN)

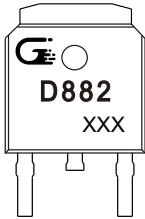
TO-252-2L/DPAK



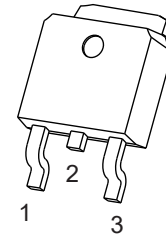
Features

- Power Dissipation

Marking

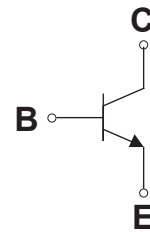


D882= Device code
XXX=YW code (Trace Code Marking)



1.BASE
2.COLLECTOR
3.EMITTER

Equivalent Circuit



MAXIMUM RATINGS ($T_a=25^\circ\text{C}$ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	40	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	6	V
I_C	Collector Current -Continuous	3	A
P_C	Collector Power Dissipation	1.25	W
T_J, T_{stg}	Operation Junction and Storage Temperature Range	-55-150	$^\circ\text{C}$

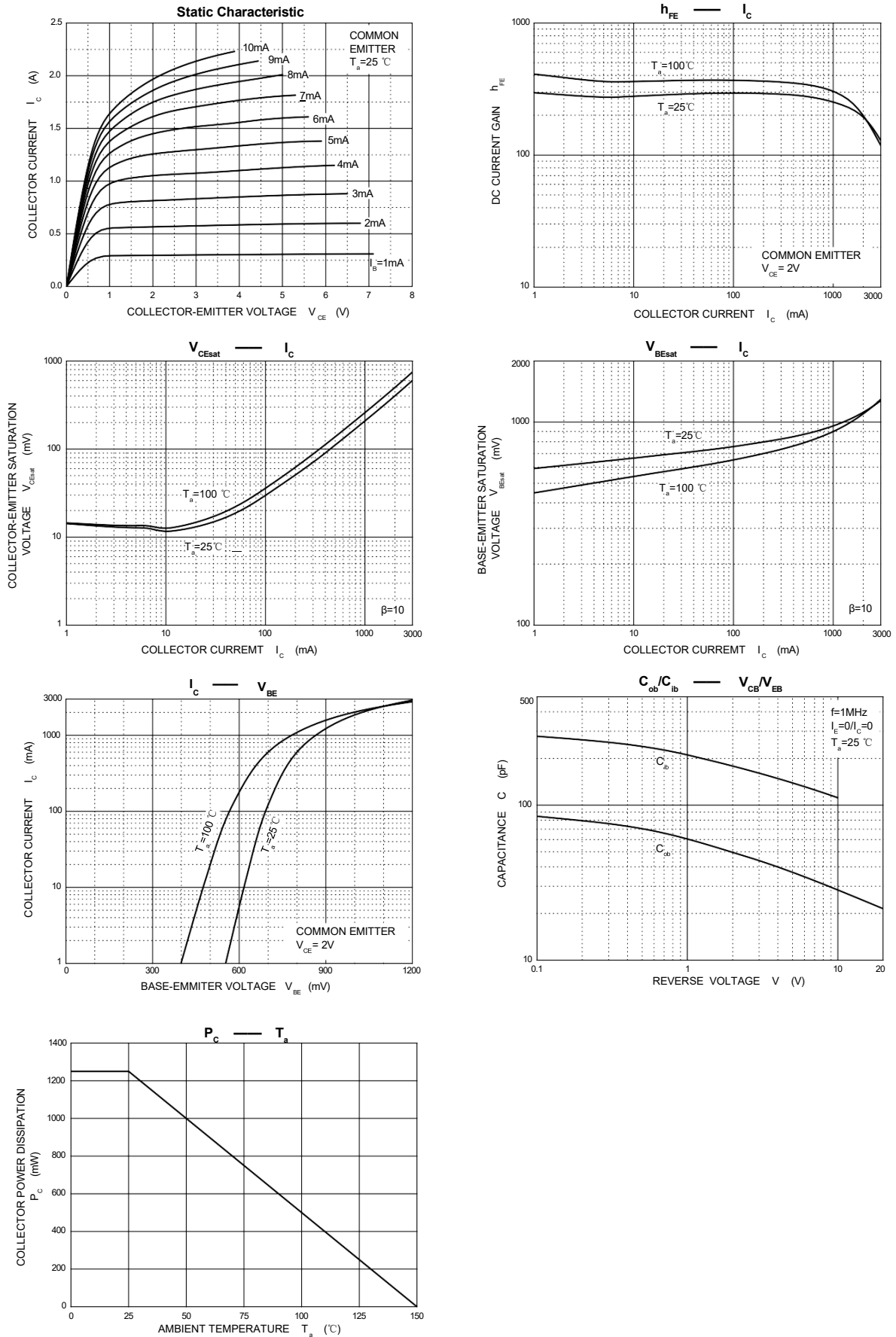
ELECTRICAL CHARACTERISTICS ($T_a= 25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	$I_C = 100\mu\text{A}, I_E=0$	40			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	$I_C = 10\text{mA}, I_B=0$	30			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	$I_E = 100\mu\text{A}, I_C=0$	6			V
Collector cut-off current	I_{CBO}	$V_{CB}= 40\text{ V}, I_E=0$			1	μA
Collector cut-off current	I_{CEO}	$V_{CE}= 30\text{ V}, I_B=0$			10	μA
Emitter cut-off current	I_{EBO}	$V_{EB}= 6\text{ V}, I_C=0$			1	μA
DC current gain	h_{FE}	$V_{CE}= 2\text{ V}, I_C= 1\text{A}$	60		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C= 2\text{A}, I_B= 0.2\text{ A}$			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C= 2\text{A}, I_B= 0.2\text{ A}$			1.5	V
Transition frequency	f_T	$V_{CE}= 5\text{V}, I_C=0.1\text{A}$ $f = 10\text{MHz}$		90		MHz

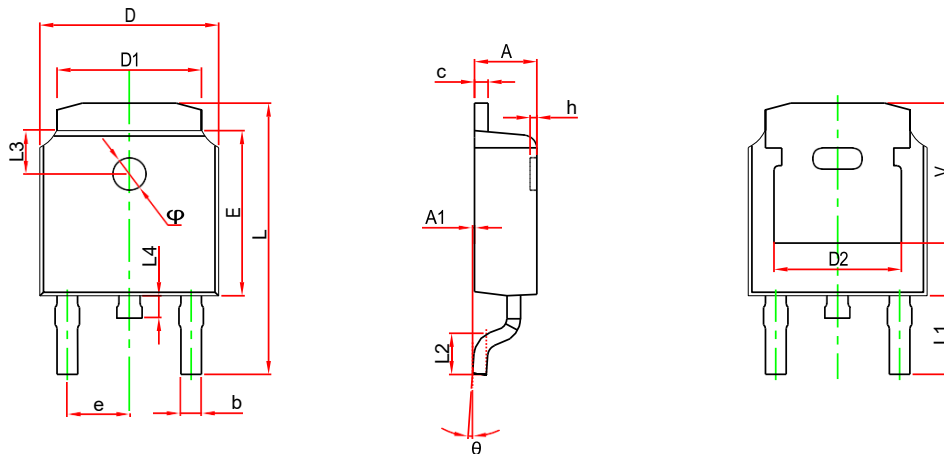
CLASSIFICATION OF h_{FE}

Rank	R	O	Y	GR
Range	60-120	100-200	160-320	200-400

TYPICAL CHARACTERISTICS

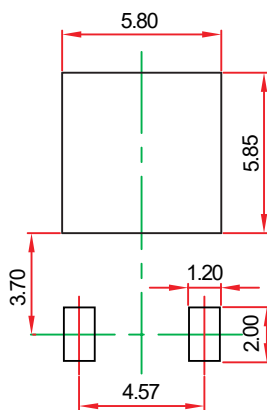


TO-252-2L Package Outline Dimensions



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 purposes only.