

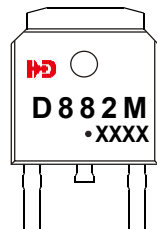
TO-252-2L Plastic-Encapsulate Transistors **HALOGEN FREE**

TRANSISTOR (NPN)

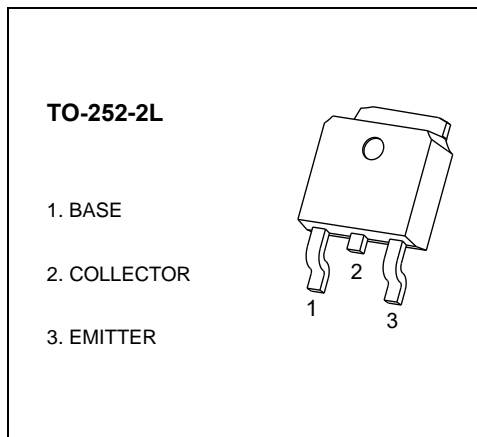
FEATURES

- Power Dissipation

MARKING



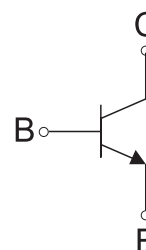
D882M= Device code
 Solid dot = Green molding compound device
 if none, the normal device
 XXXX = Code



MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	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	°C

Equivalent Circuit



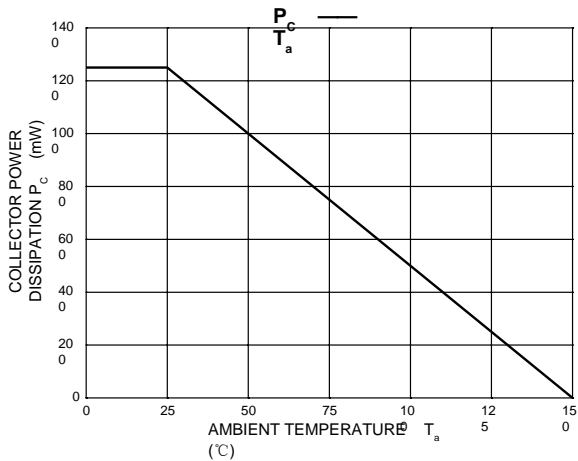
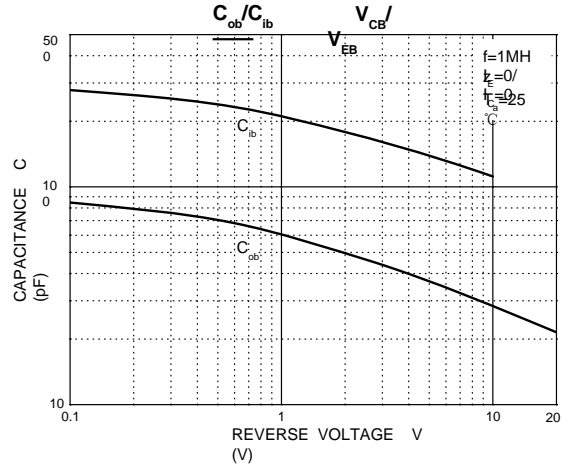
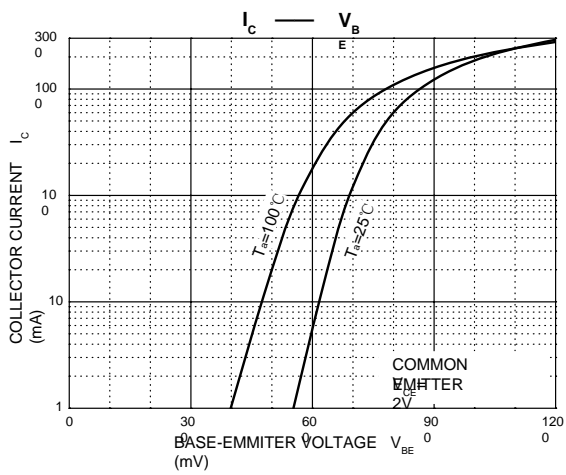
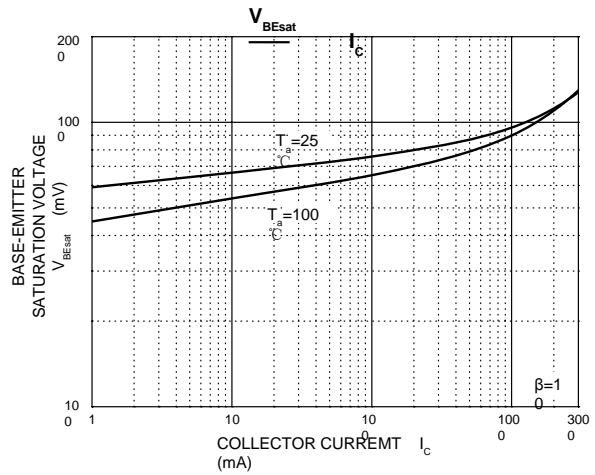
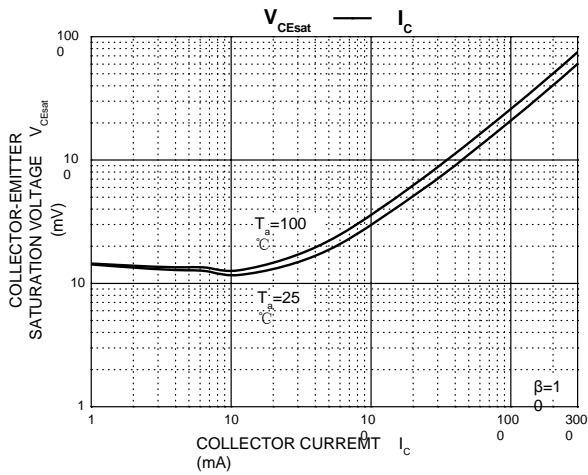
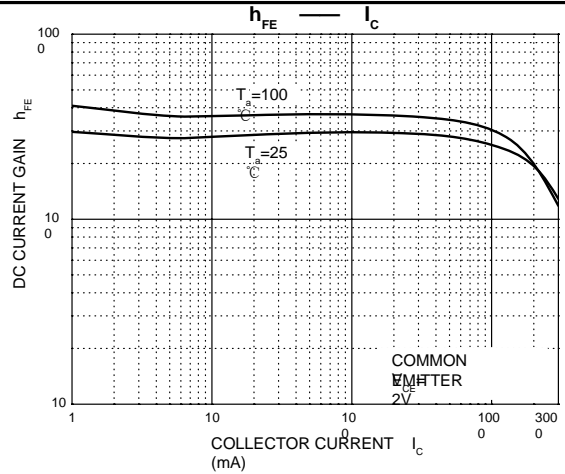
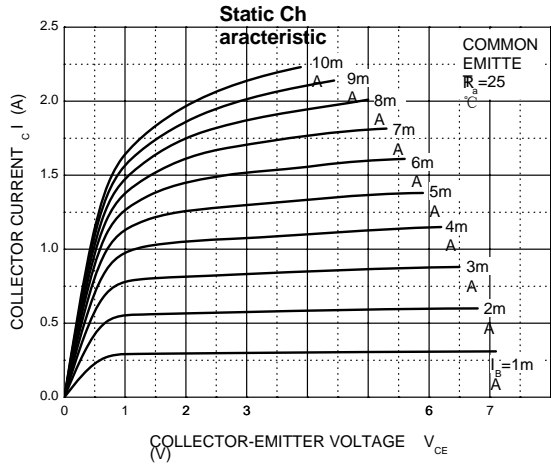
ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V(BR) _{CB0}	I _C = 100μA, I _E =0	40			V
Collector-emitter breakdown voltage	V(BR) _{CEO}	I _C = 10mA, I _B =0	30			V
Emitter-base breakdown voltage	V(BR) _{EBO}	I _E = 100μA, I _C =0	6			V
Collector cut-off current	I _{CB0}	V _{CB} = 40 V, I _E =0			1	μA
Collector cut-off current	I _{CEO}	V _{CE} = 30 V, I _B =0			10	μA
Emitter cut-off current	I _{EBO}	V _{EB} = 6 V, I _C =0			1	μA
DC current gain	h _{FE}	V _{CE} = 2 V, I _C = 1A	60		400	
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = 2A, I _B = 0.2 A			0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = 2A, I _B = 0.2 A			1.5	V
Transition frequency	f _T	V _{CE} = 5V, I _C =0.1A f =10MHz		90		MHz

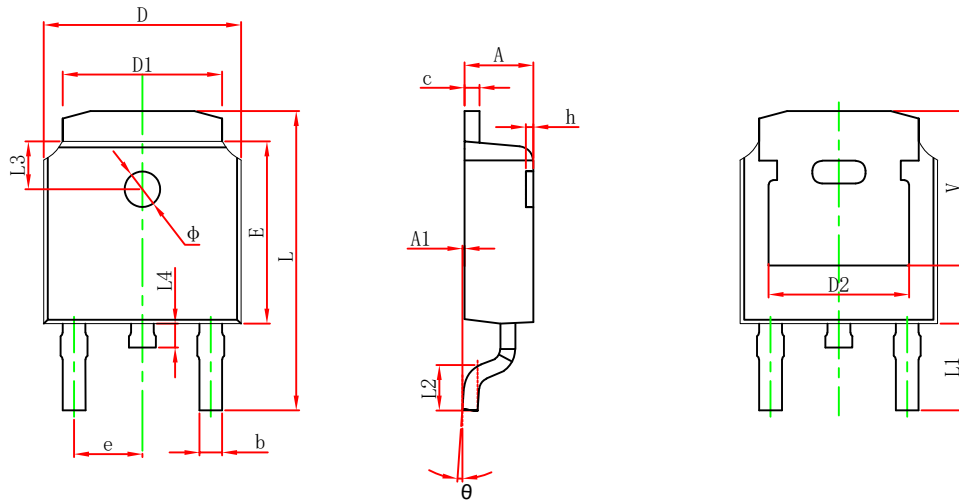
CLASSIFICATION OF h_{FE}

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

Typical Characteristics

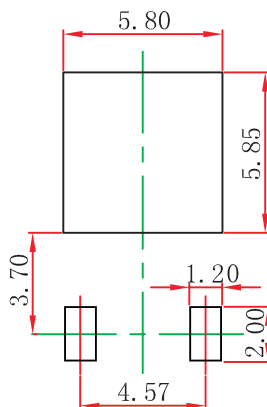


TO-252-2L Package Outline Dimensions



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
Phi	1.100	1.300	0.043	0.051
theta	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.

NOTICE

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