

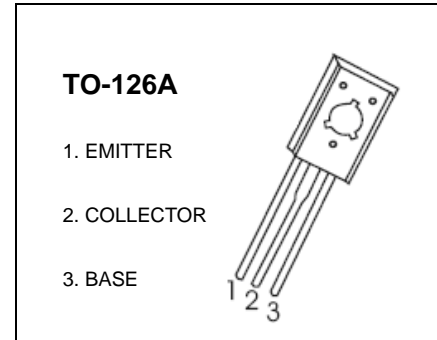


**TO-126A Plastic-Encapsulate Transistors**

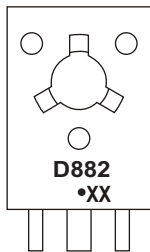
**D882** TRANSISTOR (NPN)

**FEATURES**

- Power Dissipation

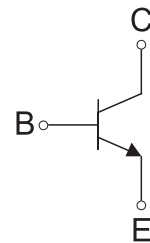


**MARKING**



D882=Device code  
 Solid dot= Green molding compound device, if none, the normal device  
 XX=Code

**Equivalent Circuit**



**ORDERING INFORMATION**

Part Number	Package	Packing Method	Pack Quantity
D882	TO-126A	Bulk	200pcs/Bag
D882-TU	TO-126A	Tube	60pcs/Tube

**MAXIMUM RATINGS (T<sub>a</sub>=25°C unless otherwise noted)**

Symbol	Parameter	Value	Unit
V <sub>CBO</sub>	Collector-Base Voltage	40	V
V <sub>CEO</sub>	Collector-Emitter Voltage	30	V
V <sub>EBO</sub>	Emitter-Base Voltage	6	V
I <sub>C</sub>	Collector Current -Continuous	3	A
P <sub>C</sub>	Collector Power Dissipation	1.25	W
T <sub>J</sub> , T <sub>stg</sub>	Operation Junction and Storage Temperature Range	-55-150	°C

## ELECTRICAL CHARACTERISTICS

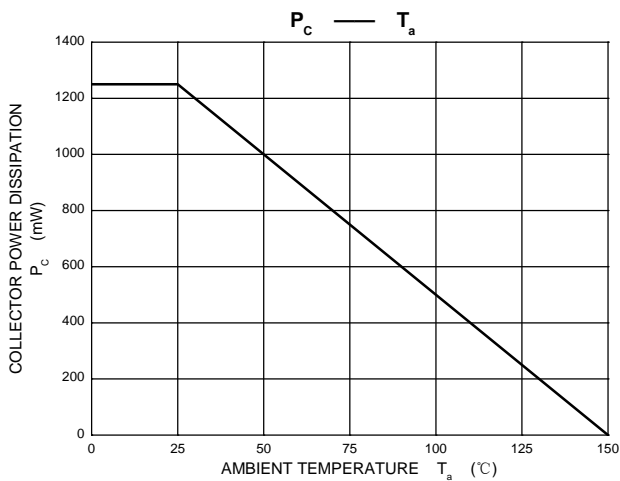
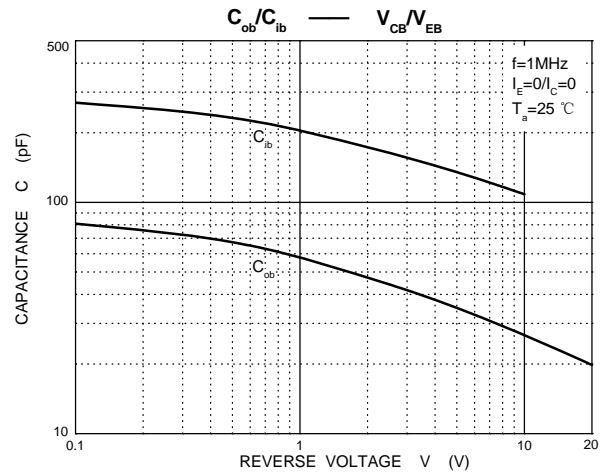
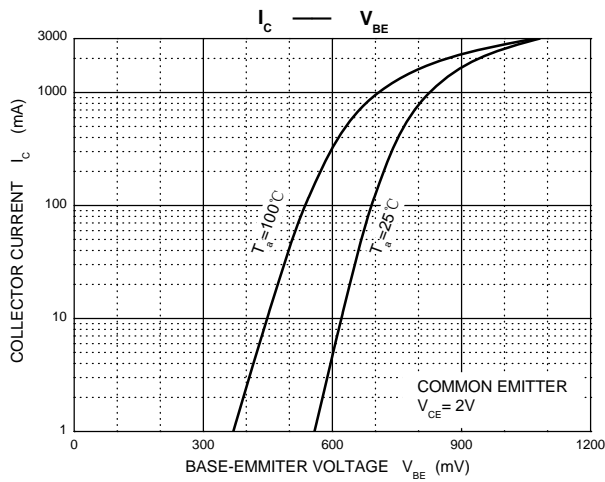
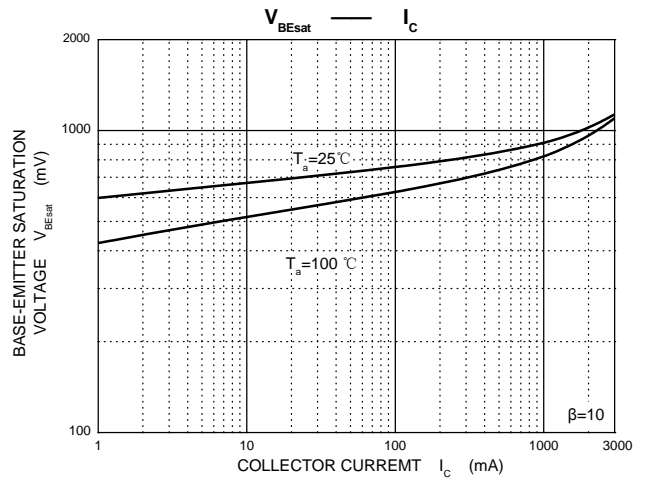
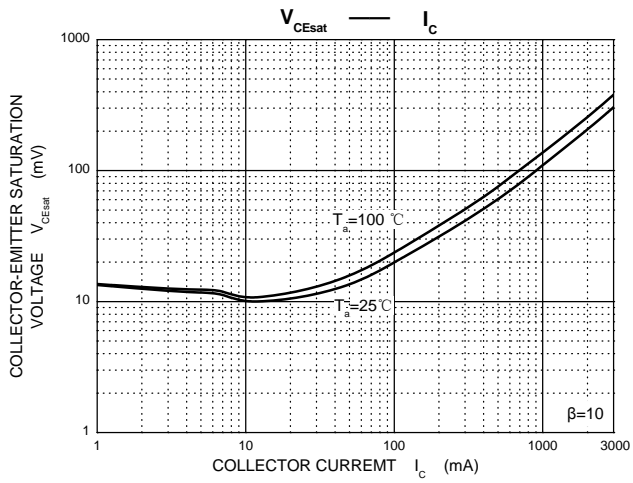
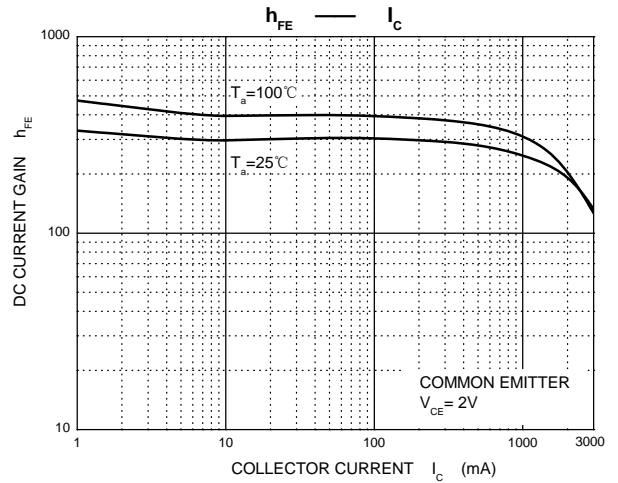
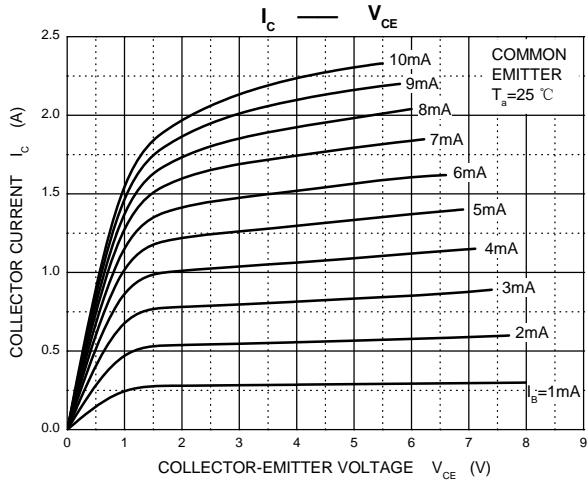
$T_a=25\text{ }^\circ\text{C}$  unless otherwise specified

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

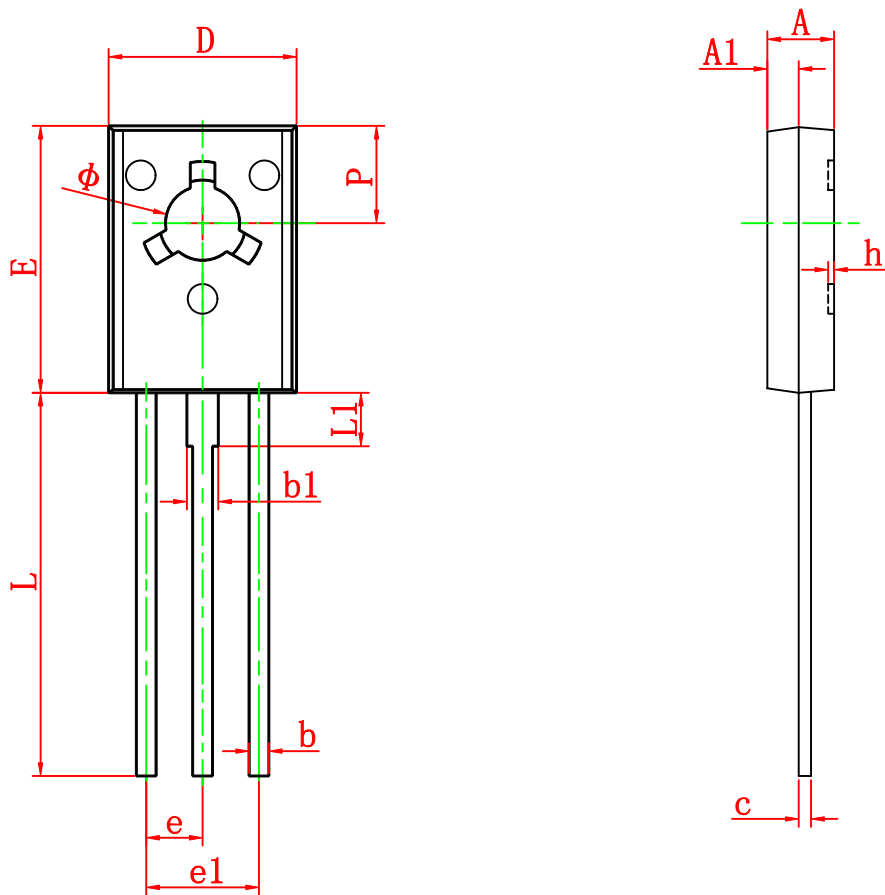
### CLASSIFICATION OF $h_{\text{FE}}$

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

# Typical Characteristics



# TO-126A Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	2.500	2.900	0.098	0.114
A1	1.100	1.500	0.043	0.059
b	0.660	0.860	0.026	0.034
b1	1.170	1.370	0.046	0.054
c	0.300	0.600	0.012	0.024
D	7.400	7.800	0.291	0.307
E	10.600	11.000	0.417	0.433
e	2.290 TYP		0.090 TYP	
e1	4.480	4.680	0.176	0.184
h	0.000	0.300	0.000	0.012
L	15.300	15.700	0.602	0.618
L1	2.100	2.300	0.083	0.091
P	3.900	4.100	0.154	0.161
Φ	3.000	3.200	0.118	0.126