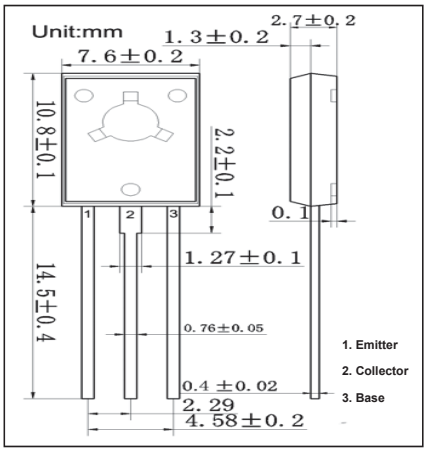
TO-126 Plastic-Encapsulate Transistors

FEATURES

- High Forward Current Transfer Ratio h_{FE} Which has Satisfactory Linearity
- Low Collector-Emitter Saturation Voltage $V_{CE(sat)}$
- TRANSISTOR (NPN)

MECHANICAL DATA

- Case style:TO-126 molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

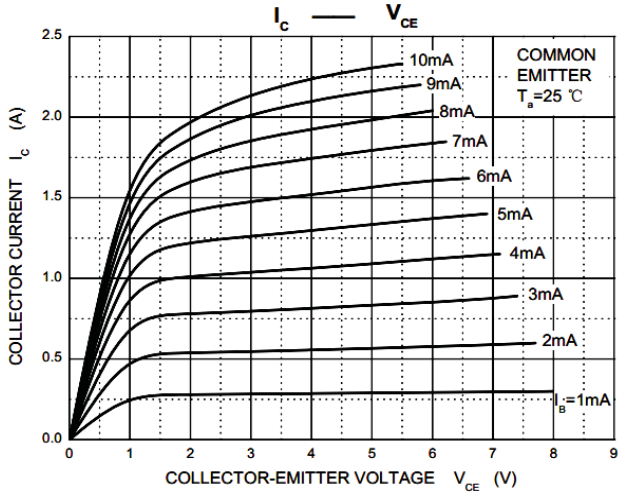
@ 25°C Ambient Temperature (unless otherwise noted)

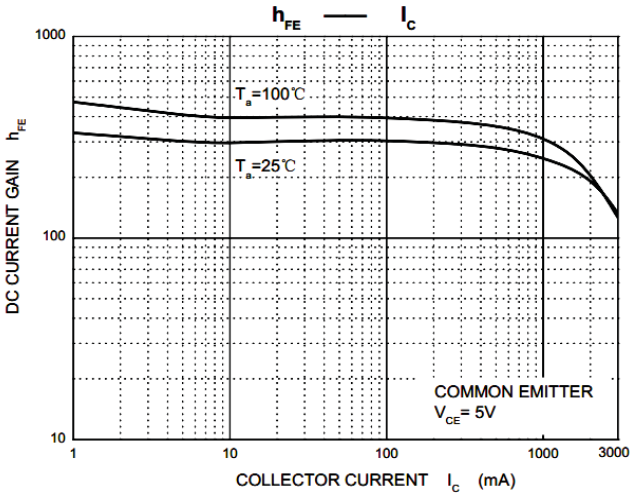
Parameter	Symbol	Value	Unit
Collector Base Voltage	V_{CBO}	40	V
Collector Emitter Voltage	V_{CEO}	30	V
Emitter Base Voltage	V_{EBO}	6	V
Collector Current -Continuous	I_C	3	A
Collector Power Dissipation	P_C	1.25	W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{stg}	-55 ~ +150	°C

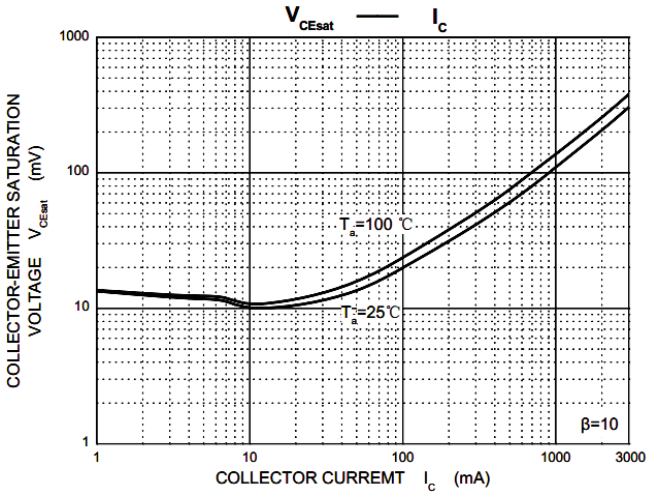
MOSFET ELECTRICAL CHARACTERISTICS T_A=25℃ unless otherwise specified

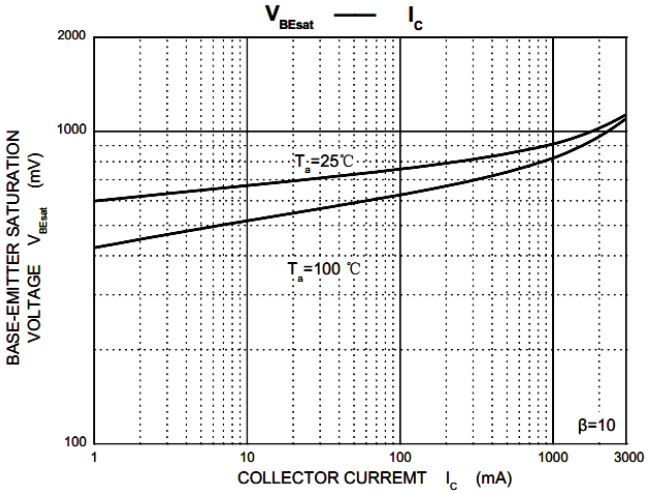
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=100μA, I_E=0	40			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=10mA, I_B=0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=100μA, I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=40V, I_E=0			1	μA
Collector cut-off current	I_{CEO}	V_{CE}=30V, I_B=0			10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=6V, I_C=0			1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C=1mA	200		400	
	$h_{FE(2)}$	V_{CE}=2V, I_C=1A	60			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=2A, I_B=0.2A			0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C=2A, I_B=0.2A			1.5	V
Transition frequency	f_T	V_{CE}=5V, I_C=0.1A, f=10MHz		90		MHz

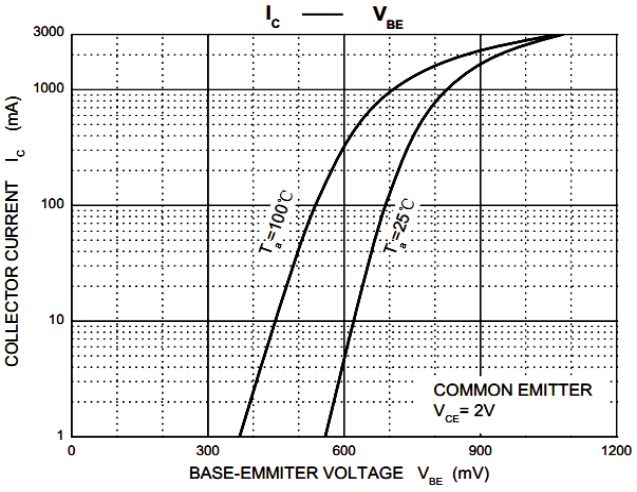
RATINGS AND CHARACTERISTIC CURVES

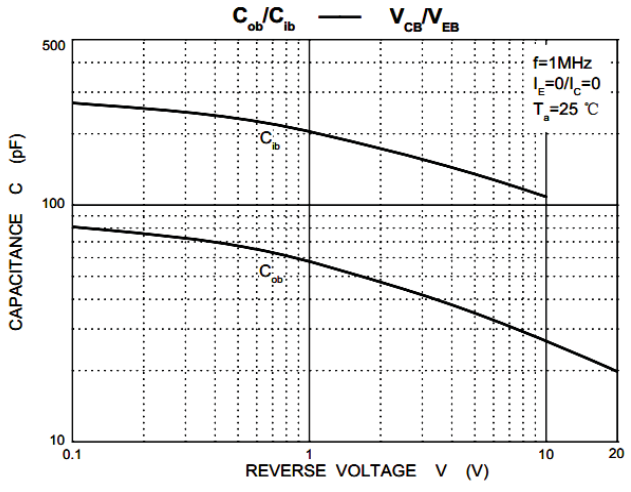


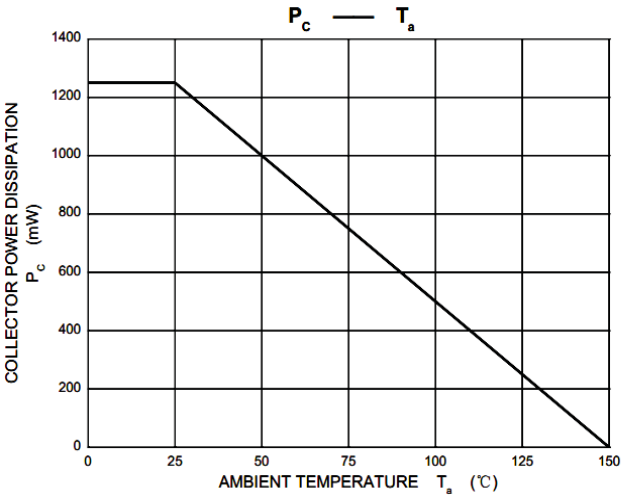











P_C — T_a
COLLECTOR POWER DISSIPATION P_C (mW)
1400
1200
1000
800
600
400
200
0
0
25
50
75
100
125
150
AMBIENT TEMPERATURE T_a (℃)