2SB1261 TRANSISTOR (PNP)

1.BASE

2.COLLECTOR

3.EMITTER

TO-252

FEATURES

- Low $V_{CE(sat)}$
- High DC Current Gain

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-7	V
I_C	Collector Current	-3	A
P_C	Collector Power Dissipation	1	W
$R_{\theta JA}$	Thermal Resistance From Junction To Ambient	125	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

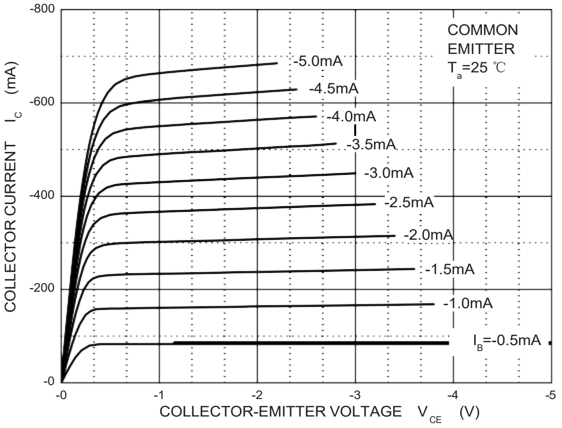
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-100μA,I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA,I_B=0	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-100μA,I_C=0	-7			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V,I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-7V,I_C=0			-10	μA
DC current gain	$h_{FE(1)}^{*}$	V_{CE}=-2V, I_C=-0.2A	60			
	$h_{FE(2)}^{*}$	V_{CE}=-2V, I_C=-0.6A	100		400	
	$h_{FE(3)}^{*}$	V_{CE}=-2V, I_C=-2A	50			
Collector-emitter saturation voltage	$V_{CE(sat)}^{*}$	I_C=-1.5A,I_B=-0.15A			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}^{*}$	I_C=-1.5A,I_B=-0.15A			-1.2	V
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0, f=1MHz		40		pF
Transition frequency	f_T	V_{CE}=-5V,I_C=-1.5A		50		MHz

*Pulse test: pulse width ≤350μs, duty cycle≤ 2.0%.

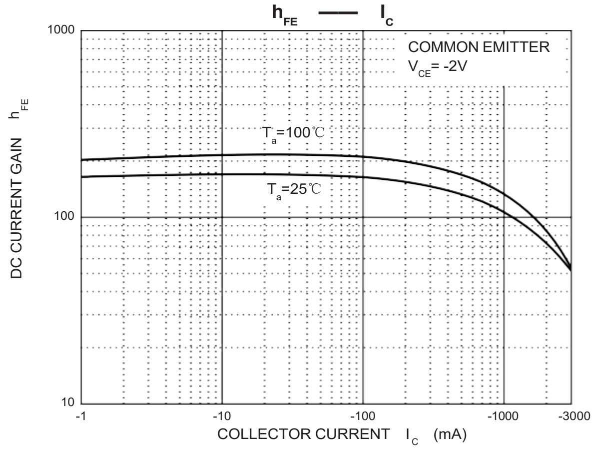
CLASSIFICATION OF $h_{FE(2)}$

RANK	M	L	K
RANGE	100-200	160-320	200-400

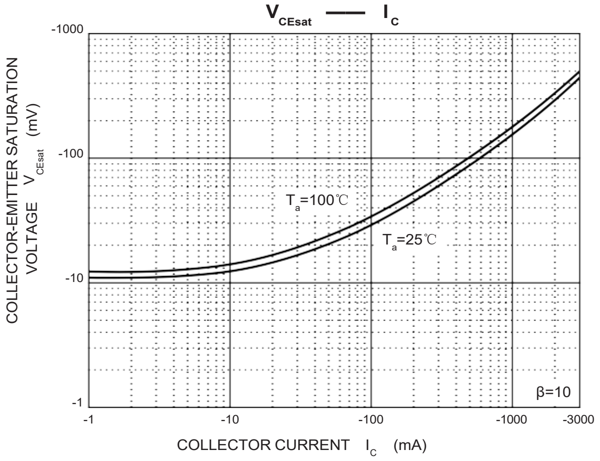
Static Characteristic



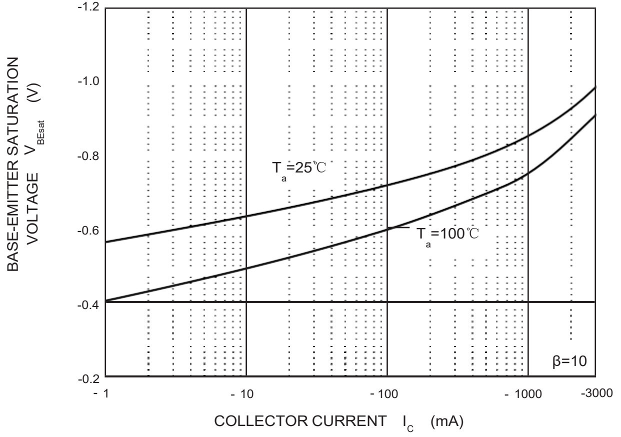
h_{FE} —— I_C



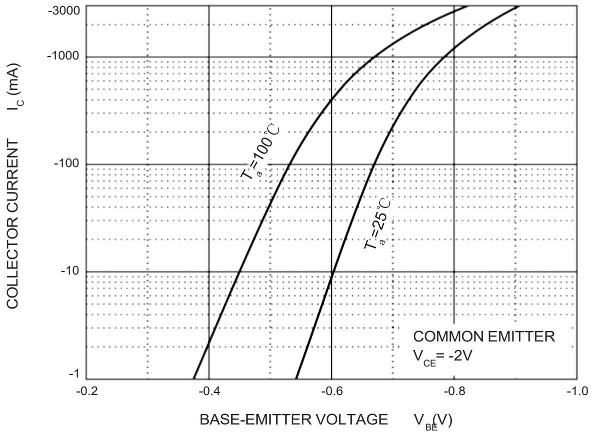
V_{CEsat} —— I_C



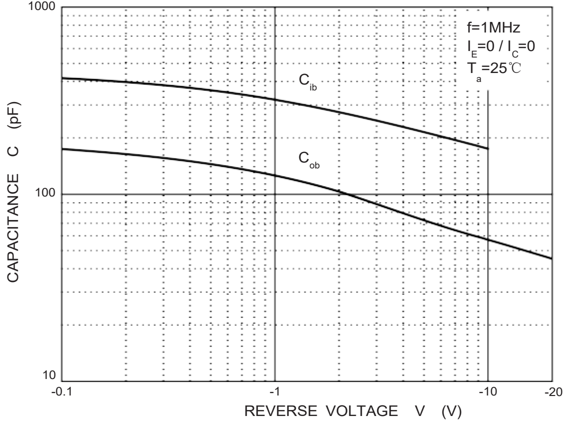
V_{BEsat} —— I_C



I_C —— V_{BE}



C_{ob} / C_{ib} —— V_{CB}/ V_{EB}



P_c —— T_a