2SD880 TRANSISTOR (NPN)

TO-220C

1.BASE
2.COLLECTOR
3.EMITTER

FEATURES

- Low Frequency Power Amplifier
- Complement to 2SB834

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 -Continuous	3	A
P_C	Collector Power Dissipation	1.5	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

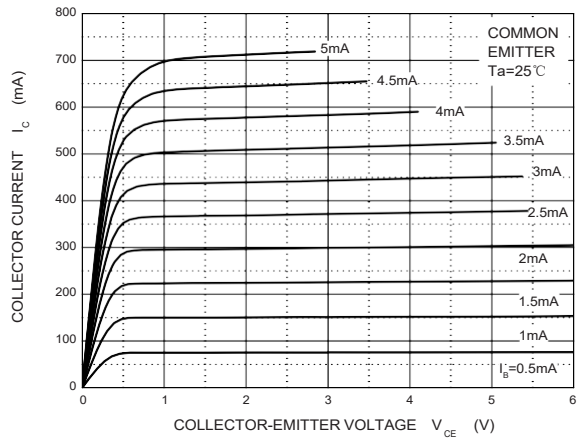
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

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=50mA, 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			100	μA
Emitter cut-off current	I_{EBO}	V_{EB}=7V, I_C=0			100	μA
DC current gain	h_{FE}	V_{CE}=5V, I_C=500mA	60		300	
Collector-emitter saturation voltage	$V_{CE\ (sat)}$	I_C=3A, I_B=300mA			1	V
Base-emitter voltage	V_{BE}	I_C=0.5A, V_{CE}= 5V			1	V
Transition Frequency	f_T	V_{CE}=5 V, I_C=500mA		3		MHz
Collector output capacitance	C_{ob}	V_{CB}=10V, I_E=0, f=1MHz		40		pF
Turn on time	t_{on}	I_{B1}=-I_{B2}=0.2A, I_C=2A V_{CC}=30V, PW=20μs		0.8		μs
Storage time	t_s			1.5		μs
Fall time	t_f			0.8		μs

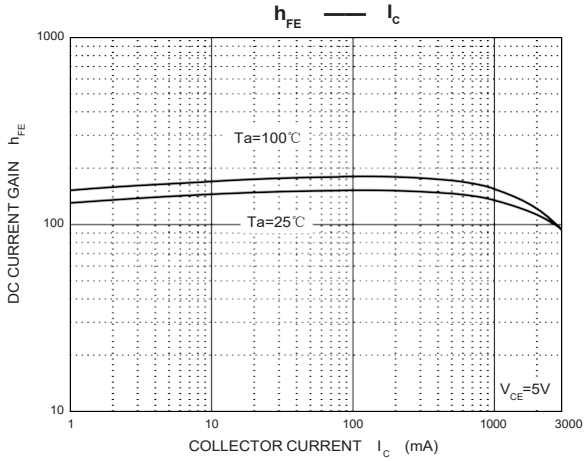
CLASSIFICATION OF h_{FE}

Rank	O	Y	GR
Range	60-120	100-200	150-300

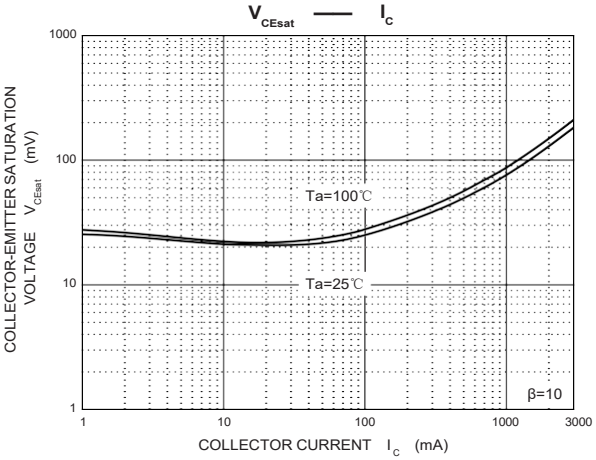
Static Characteristic



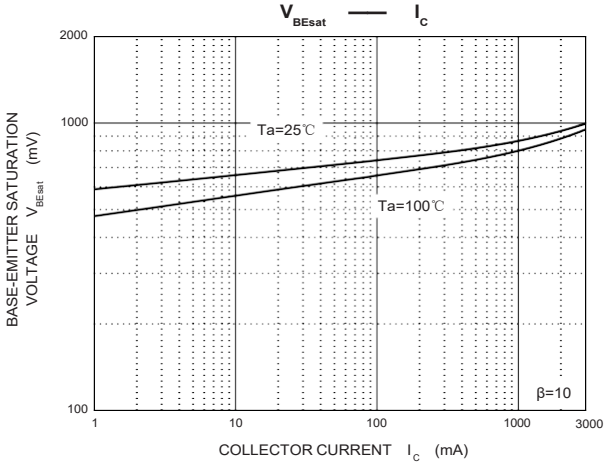
h_{FE} —— I_C



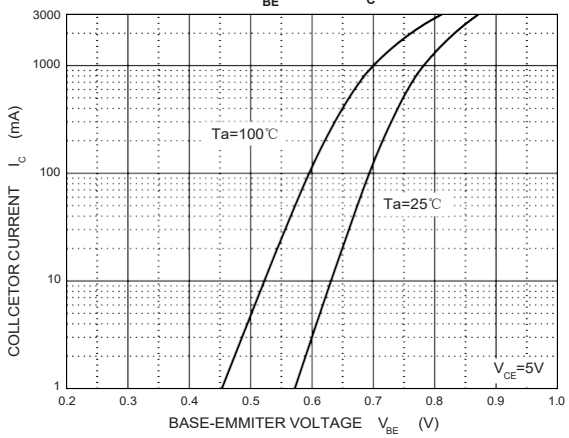
V_{CEsat} —— I_C



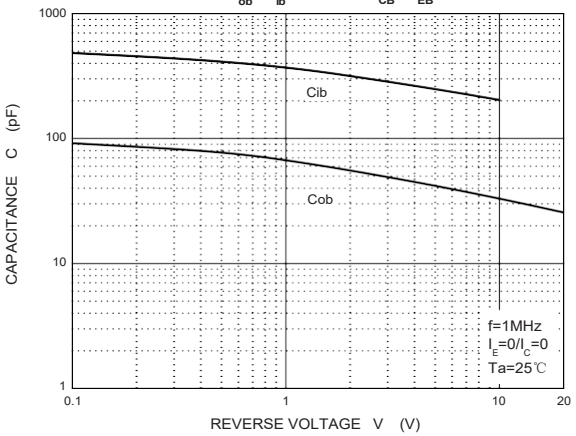
V_{BEsat} —— I_C



V_{BE} —— I_C



C_{ob} / C_{ib} —— V_{CB} / V_{EB}



P_C —— T_a