2SB1274 TRANSISTOR (PNP)

TO-220C

1.BASE
2.COLLECTOR
3.EMITTER

FEATURES

- Wide ASO (Adoption of MBIT Process).
- Low Saturation Voltage.
- High Reliability.
- High Breakdown Voltage.

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	-6	V
I_C	Collector Current -Continuous	-3	A
P_C	Collector Power Dissipation	2	W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

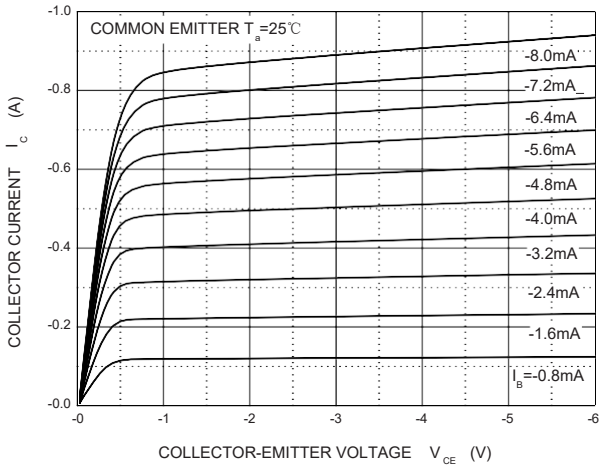
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C =-1mA, I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-5mA, I_B=0	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-1mA, I_C=0	-6			V
Collector cut-off current	I_{CBO}	V_{CB}=-40V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0			-0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=-5V, I_C=-500mA	70		280	
	$h_{FE(2)}$	V_{CE}=-5V, I_C=-3A	20			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A, I_B=-200mA			-1	V
Base-emitter voltage	V_{BE}	V_{CE}=-5V, I_C=-500mA			-1	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-500mA		100		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MHz		60		pF

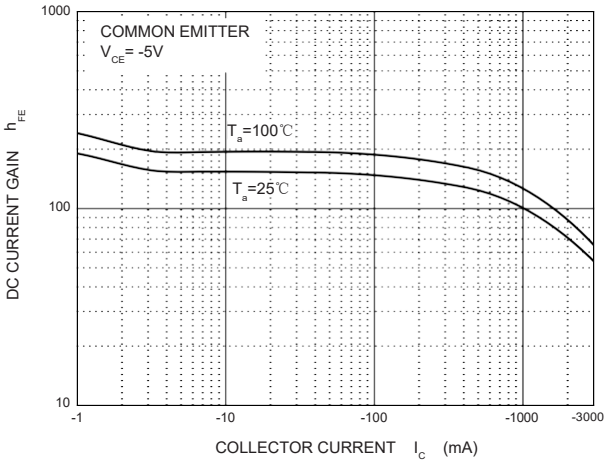
CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	R	S
Range	70-140	100-200	140-280

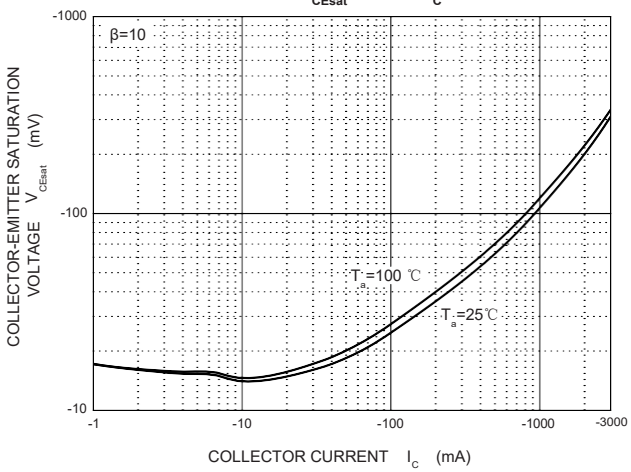
Static Characteristic



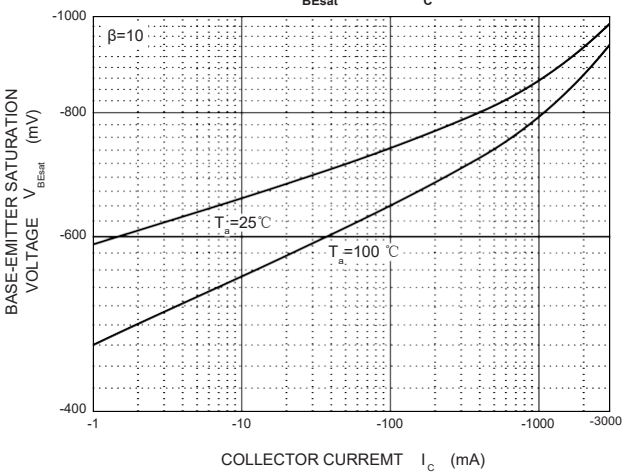
h_{FE} —— I_C



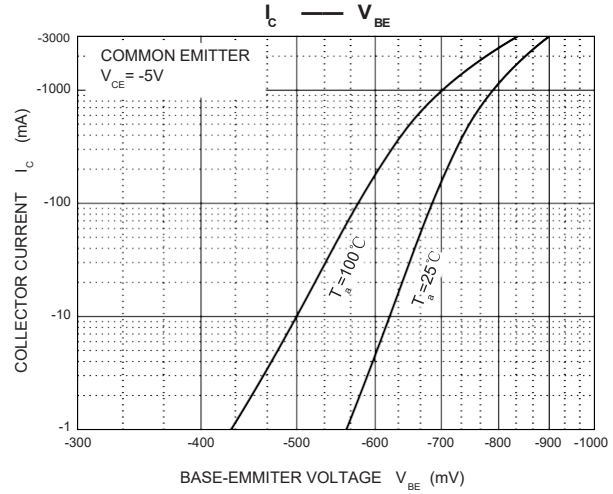
V_{CEsat} —— I_C



V_{BEsat} —— I_C



I_C —— V_{BE}



P_C —— T_a