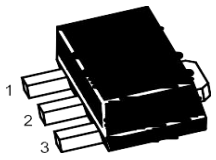
Plastic-Encapsulate Transistors

TRANSISTOR (PNP)



1.Base 2.Collector 3.Emitter
SOT-89 Plastic Package

FEATURES

Compliment to 2SA2071

MARKING: Y2

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	0.5	W
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	250	℃/W
T_J	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55~150	℃

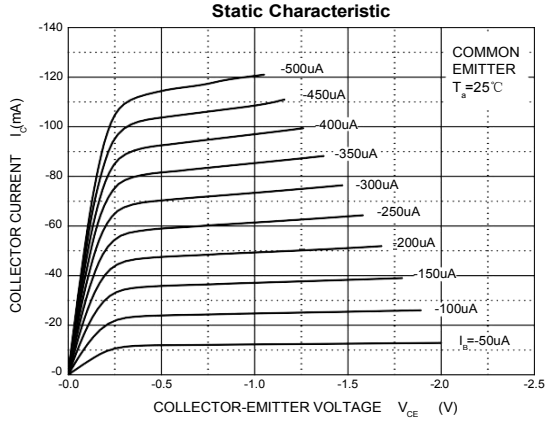
ELECTRICAL CHARACTERISTICS (T_a=25℃ unless otherwise specified)

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	-6	-	-	V
Collector cut-off current	I_{CBO}	V_{CB}= -40 V,I_E=0	-	-	-1.0	μA
Emitter cut-off current	I_{EBO}	V_{EB}= -4V, I_C=0	-	-	-1.0	μA
DC current gain	$h_{FE(1)}$	V_{CE}= -2V, I_C= -100mA	120	-	270	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-2A, I_B= -0.2A	-	-0.2	-0.5	V
Transition frequency	f_T	V_{CE}= -10V, I_C= -100mA f=10MHz	-	180	-	MHz
output capacitance	C_{ob}	V_{CB}=-10V,I_E=0A f=1MHz	-	50	-	pF
Turn-on time	Ton	Ic=-3A, IB1=-300mA, IB2=300mA, VCC=-25V, RL=8.3Ω, See test circuit	-	20	-	ns
Storage time	Tstg		-	150	-	ns
Fall time	Tf		-	20	-	ns

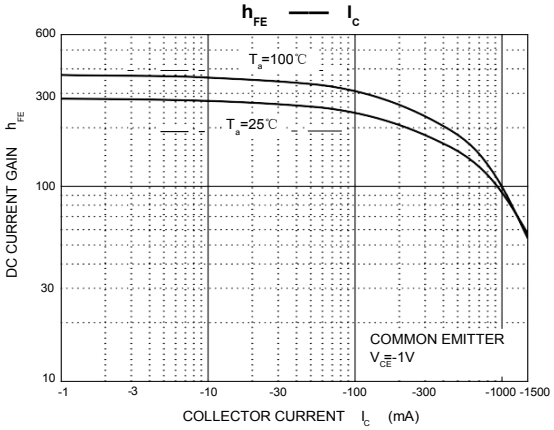
CLASSIFICATION OF $h_{FE(1)}$

Rank	Q	
HFE	120-270	

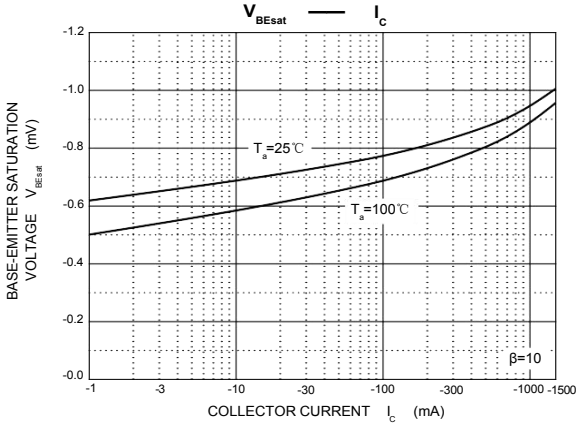
Static Characteristic



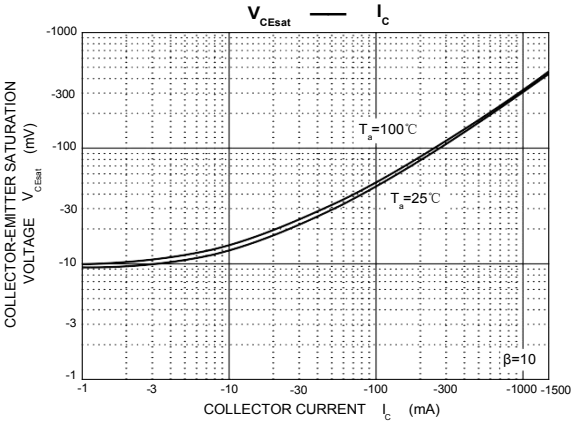
h_{FE} —— I_C



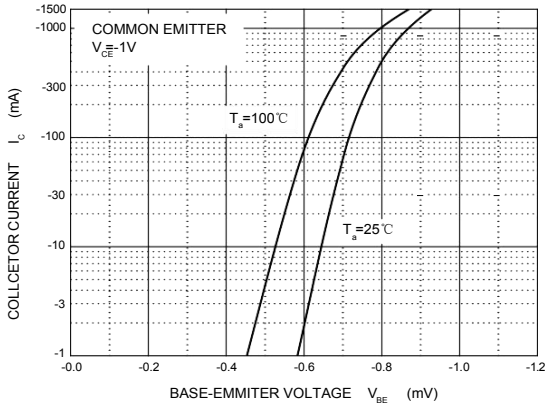
V_{BEsat} —— I_C



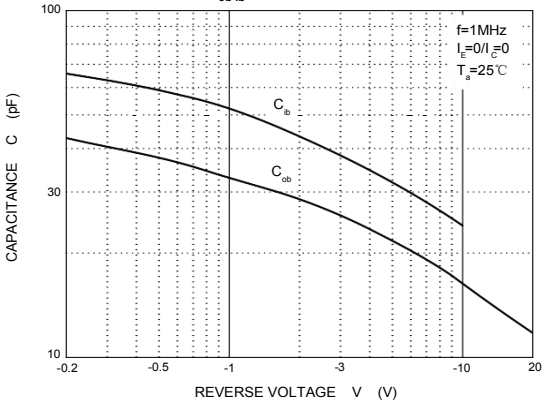
V_{CEsat} —— I_C



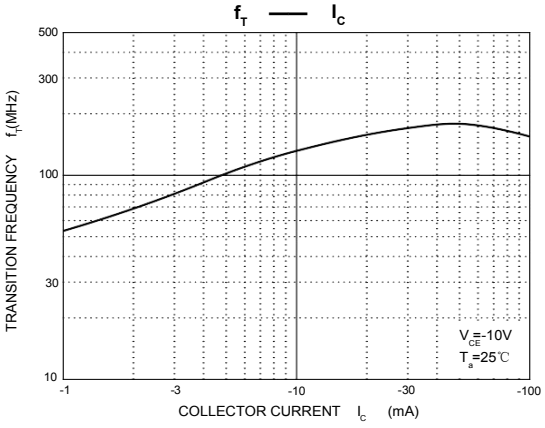
V_{BE} —— I_C



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



f_T —— I_C



P_C —— T_a