TO-92 Plastic-Encapsulate Transistors

2SA1273 TRANSISTOR (PNP)

1. Emitter 2. Base 3. Collector
TO-92 Plastic Package

FEATURES

- Complementary to KTC3205.

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-30	V
V_{CEO}	Collector-Emitter Voltage	-30	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-2	A
P_C	Collector Power Dissipation	1	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=-1mA, I_E=0	-30			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= -1mA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-30V, I_E=0			-0.1	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-5V, I_C=0			-0.1	μA
DC current gain	h_{FE}	V_{CE}= -2V, I_C=-500mA	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-1.5A, I_B=-30mA			-2.0	V
Base-emitter voltage	V_{BE}	V_{CE}= -2V, I_C= -500mA			-1.0	V
Transition frequency	f_T	V_{CE}= -2V, I_C= -500mA		120		MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V, I_E=0, f=1MH$_Z$		48		pF

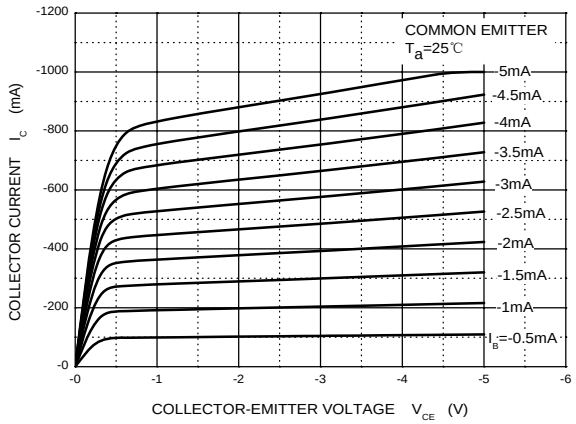
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

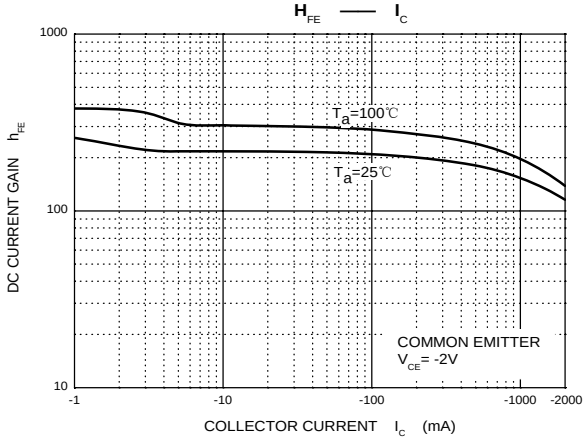
Typical Characteristics

2SA1273

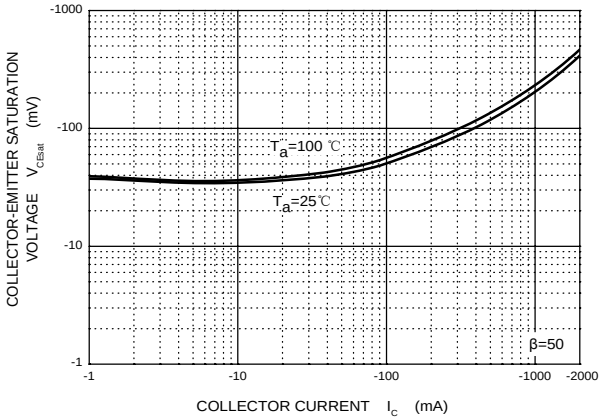
Static Characteristic



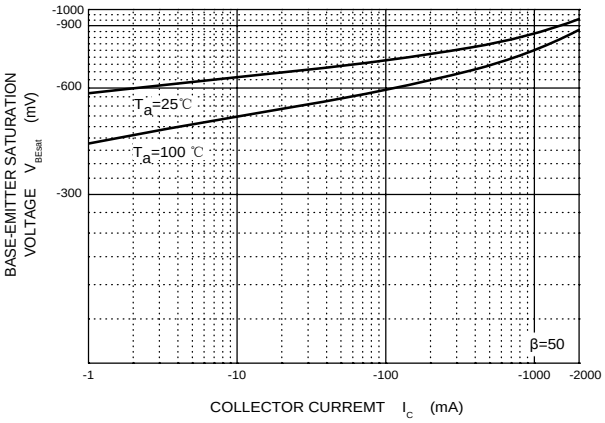
H_{FE} — I_C



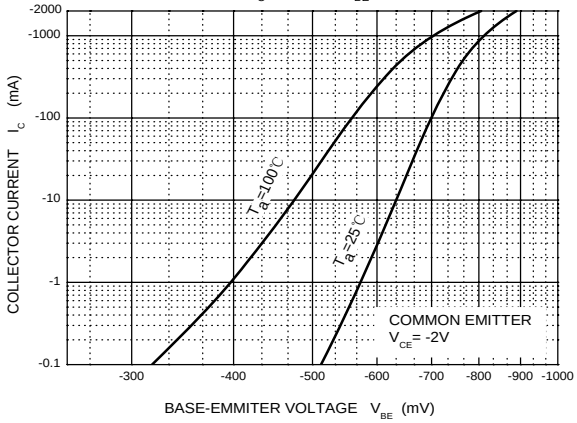
V_{CEsat} — I_C



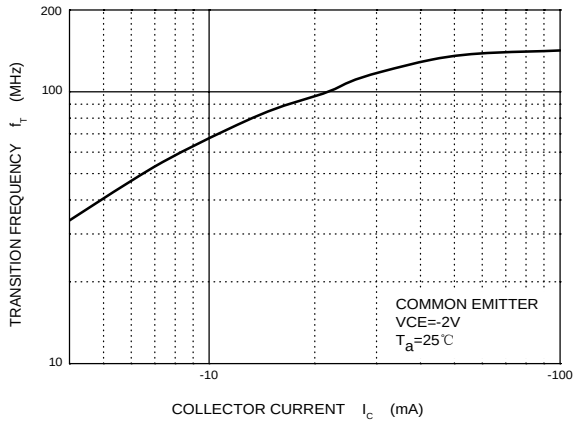
V_{BEsat} — I_C



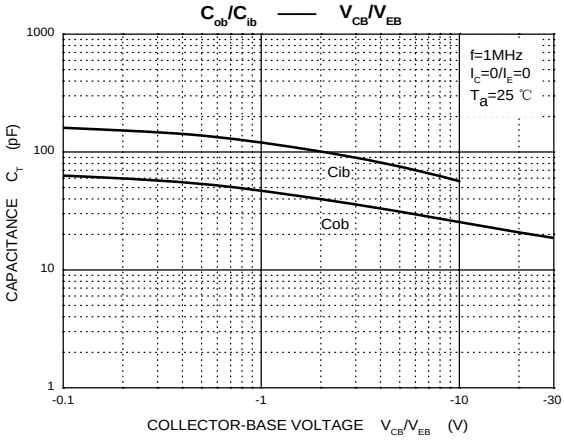
I_C — V_{BE}



f_T — I_C



C_{ob}/C_{ib} — V_{CB}/V_{EB}



P_C — T_a