

TO-92 Plastic-Encapsulate Transistors

2SA1273 TRANSISTOR (PNP)

FEATURES

- Complementary to KTC3205.



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

MAXIMUM RATINGS (T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-30	V
V _{CE0}	Collector-Emitter Voltage	-30	V
V _{EB0}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-2	A
P _C	Collector Power Dissipation	1	W
T _J	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

ELECTRICAL CHARACTERISTICS (T_a=25°C 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=1MHz		48		pF

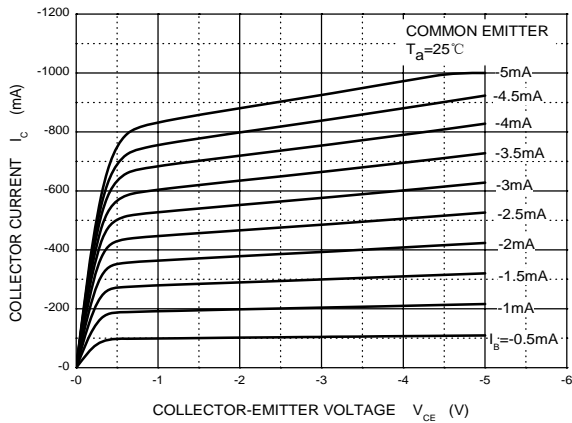
CLASSIFICATION OF h_{FE(1)}

Rank	O	Y
Range	100-200	160-320

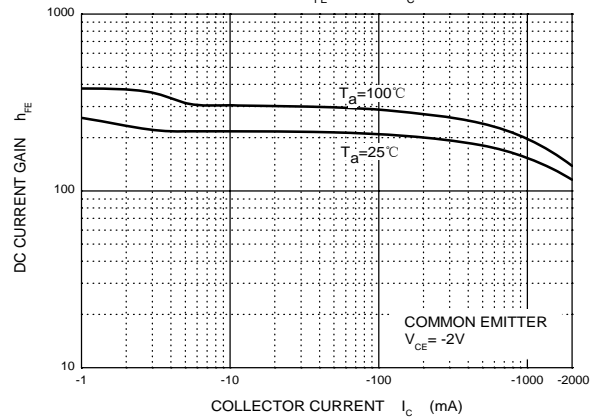
Typical Characteristics

2SA1273

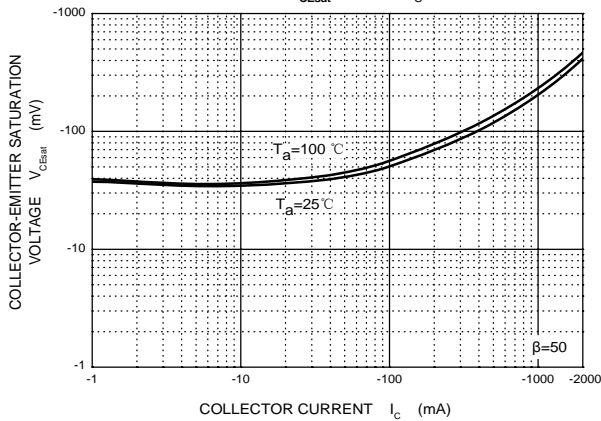
Static Characteristic



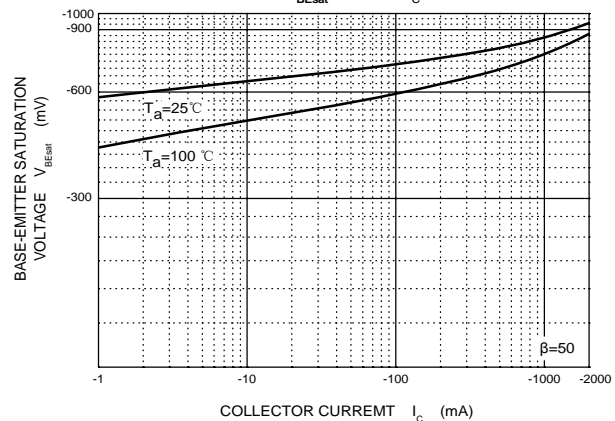
H_{FE} — I_c



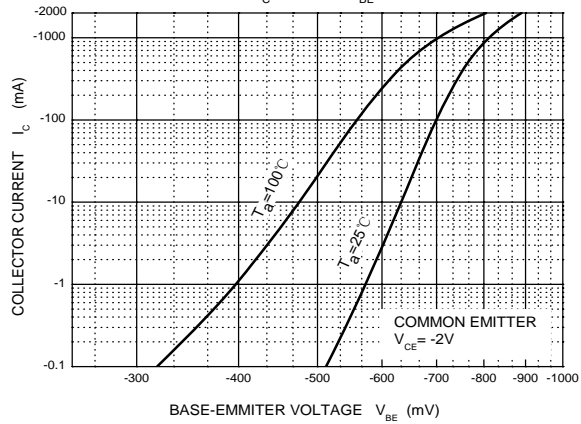
V_{CEsat} — I_c



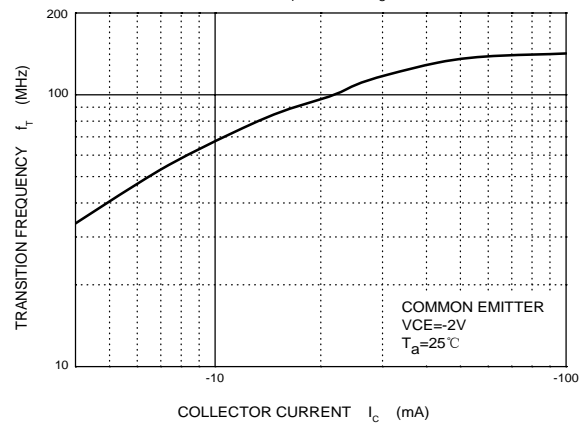
V_{BEsat} — I_c



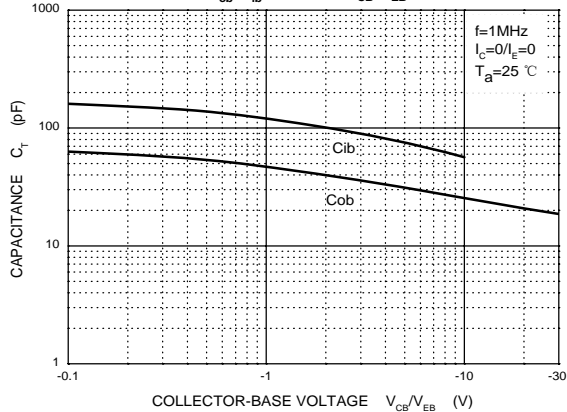
I_c — V_{BE}



f_T — I_c



C_{ob}/C_{ib} — V_{CB}/V_{EB}



P_c — T_a

