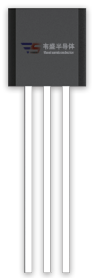
KTC3203 TRANSISTOR (NPN)



1.EMITTER
2.COLLECTOR
3.BASE

TO-92

FEATURES

- Complementary to KTA1271

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
KTC3203	T，-92	Bulk	1000pcs/Bag
KTC3203-TA	T，-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	35	V
V_{CEO}	Collector-Emitter Voltage	30	V
V_{EBO}	Emitter-Base Voltage	5	V
I_C	Collector Current -Continuous	0.8	A
P_D	Collector Power Dissipation	625	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	200	℃ /W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55~+150	℃

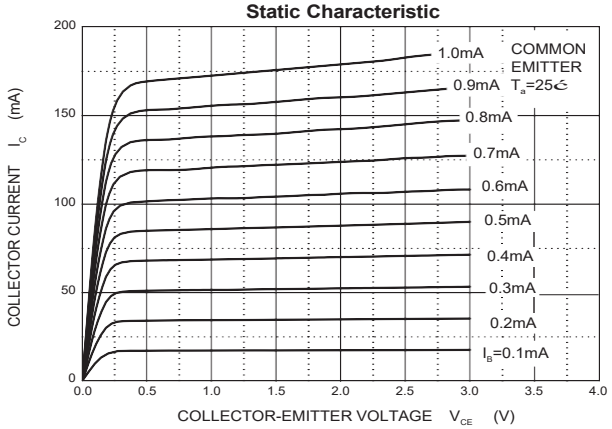
T_a=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 0.1mA, I_B=0	35			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= 0.1mA, I_C=0	5			V
Collector cut-off current	I_{CBO}	V_{CB}= 35V , I_E=0			0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}= 25V , I_B=0			0.2	μA
Emitter cut-off current	I_{EBO}	V_{EB}= 5V, I_C=0			0.1	μA
DC current gain	$h_{FE(1)}$	V_{CE}=1V, I_C= 100mA	100		320	
	$h_{FE(2)}$	V_{CE}=1V, I_C= 700mA	35			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= 500 mA, I_B= 20mA			0.5	V
Base-emitter voltage	V_{BE}	V_{CE}= 1V, I_C= 10mA			0.8	V
Transition frequency	f_T	V_{CE}= 5 V, I_C= 10mA		120		MHz
Collector Output Capacitance	C_{ob}	V_{CB}=10V,I_E= 0,f=1MHz		13		pF

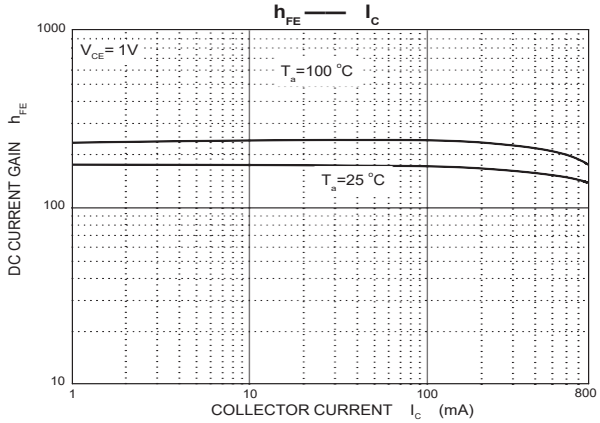
CLASSIFICATION OF $h_{FE(1)}$

Rank	O	Y
Range	100-200	160-320

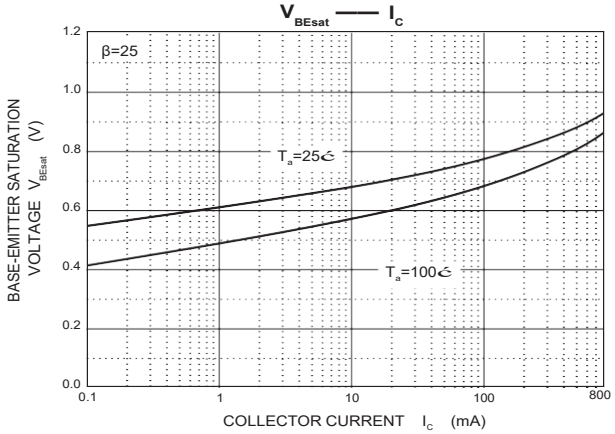
Static Characteristic



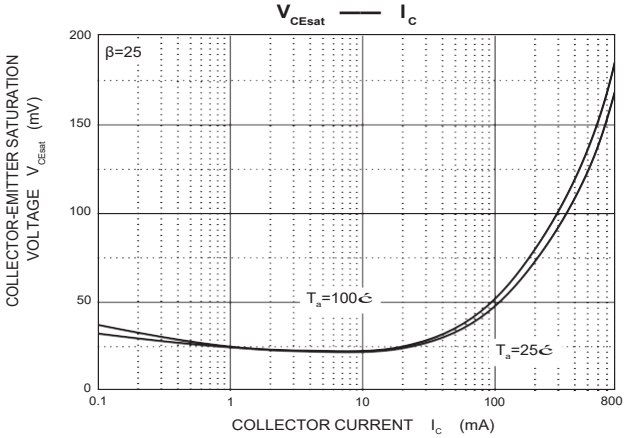
h_{FE} —— I_C



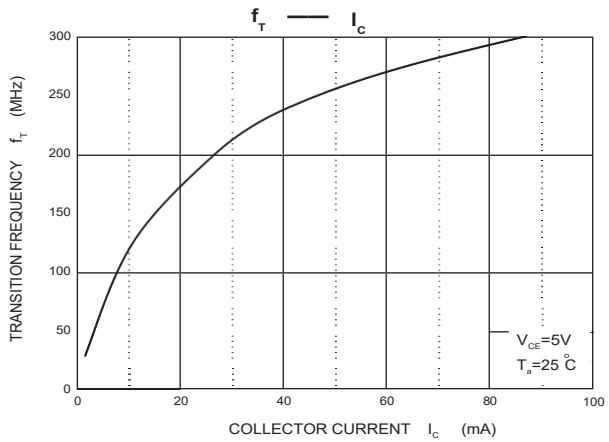
V_{BEsat} —— I_C



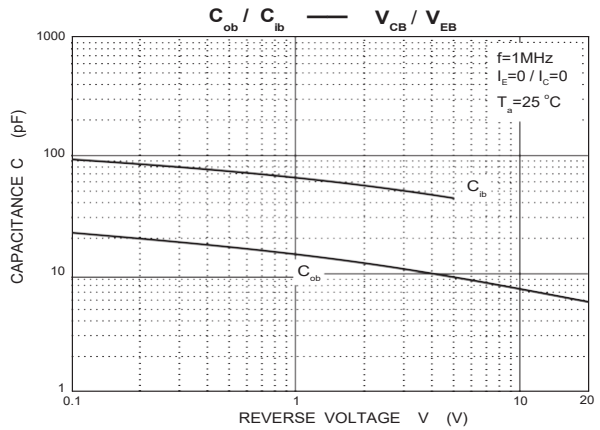
V_{CEsat} —— I_C



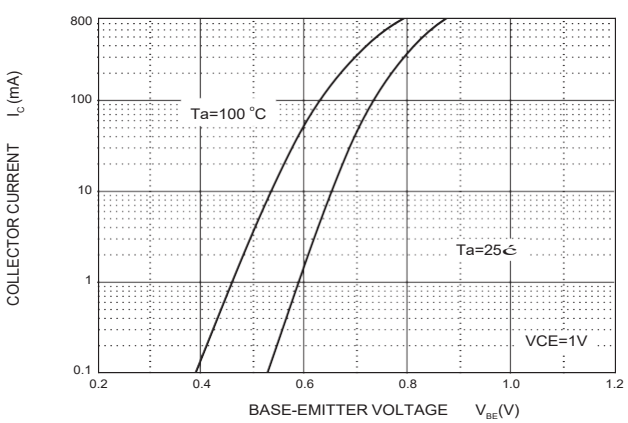
f_T —— I_C



C_{ob} / C_{ib} —— V_{CB} / V_{EB}



V_{BE} —— I_C



P_c —— T_a