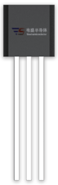
A1015 TRANSISTOR (PNP)

FEATURES

- Power dissipation



1.EMITTER

2.COLLECTOR

3.BASE

ORDERING INFORMATION

Part Number	Package	Packing Method	Pack Quantity
A1015	TO-92	Bulk	1000pcs/Bag
A1015-TA	TO-92	Tape	2000pcs/Box

MAXIMUM RATINGS (T_a=25℃ unless otherwise noted)

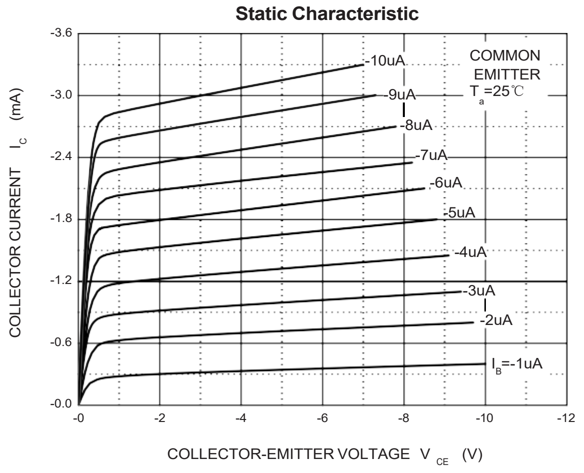
Symbol	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	-50	V
V_{CEO}	Collector-Emitter Voltage	-50	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-150	mA
P_D	Collector Power Dissipation	400	mW
$R_{\theta JA}$	Thermal Resistance from Junction to Ambient	312	℃/W
T_J,T_{stg}	Operation Junction and Storage Temperature Range	-55 ~+150	℃

T_a=25℃ unless otherwise specified

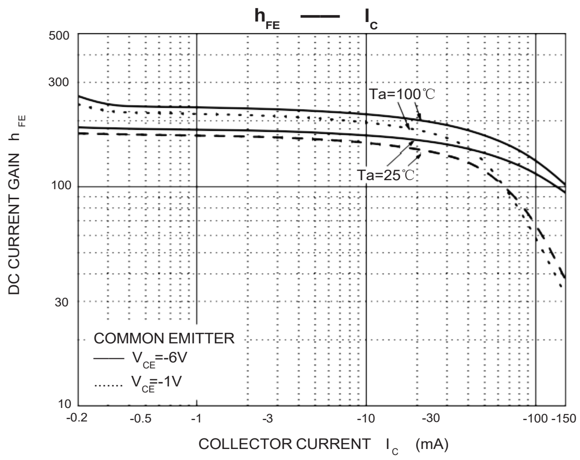
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C= -100μA, I_E=0	-50			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C= -0.1mA, I_B=0	-50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E= -100μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}= -50V,I_E=0			-0.1	μA
Collector cut-off current	I_{CEO}	V_{CE}= -50V, I_B=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}= -6V, I_C= -2mA	70		400	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C= -100mA, I_B= -10mA			-0.3	V
Base-emitter saturation voltage	$V_{BE(sat)}$	I_C= -100mA, I_B= -10mA			-1.1	V
Transition frequency	f_T	V_{CE}= -10 V, I_C= -1mA f =30MHz	80			MHz
Collector output capacitance	C_{ob}	V_{CB}=-10V,I_E=0,f=1MHz			7	pF
Noise figure	NF	V_{CE}= -6 V, I_C= -0.1mA, f =1kHz,R_G=10kΩ			6	dB

CLASSIFICATION OF h_{FE}

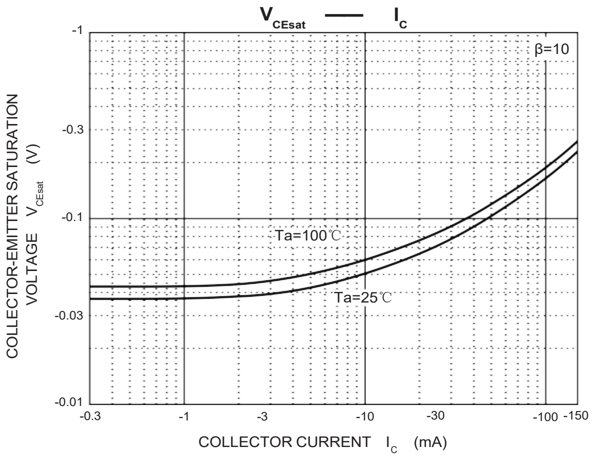
Rank	O	Y	GR
Range	70-140	120-240	200-400



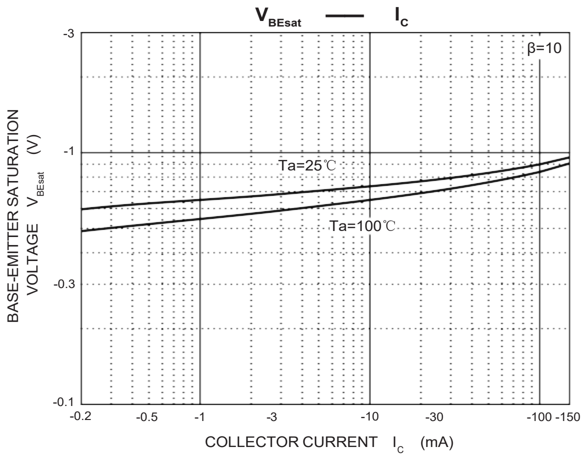
Static Characteristic



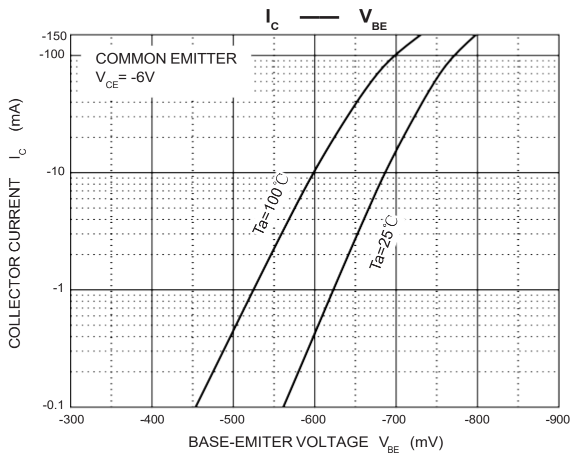
h_{FE} —— I_C



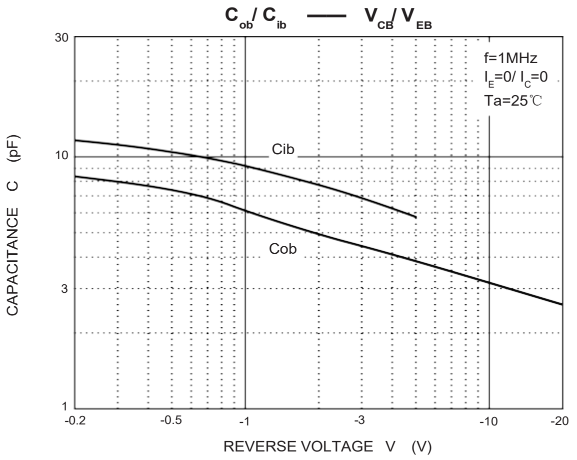
V_{CEsat} —— I_C



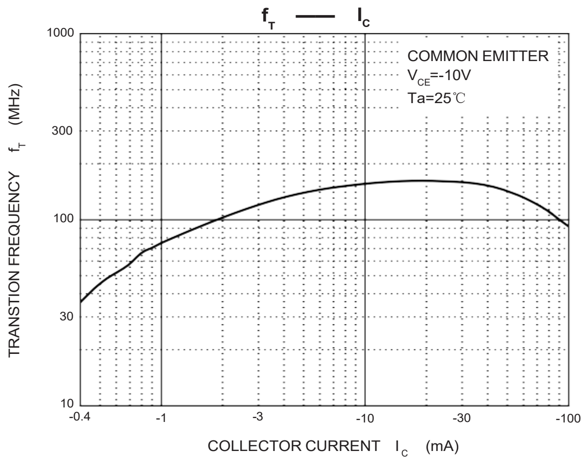
V_{BEsat} —— I_C



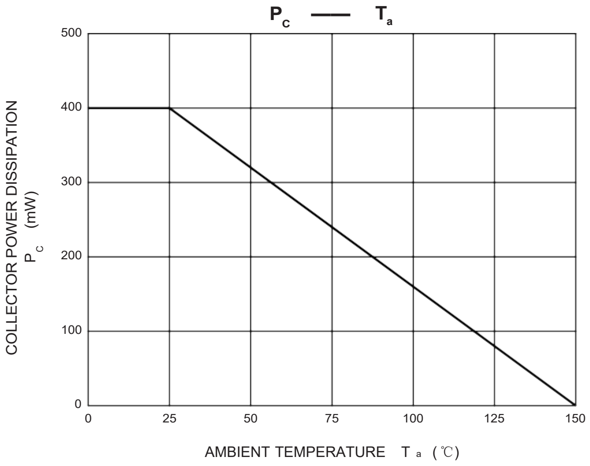
I_C —— V_{BE}



C_{ob}/C_{ib} —— V_{CB}/V_{EB}



f_T —— I_C



P_C —— T_a