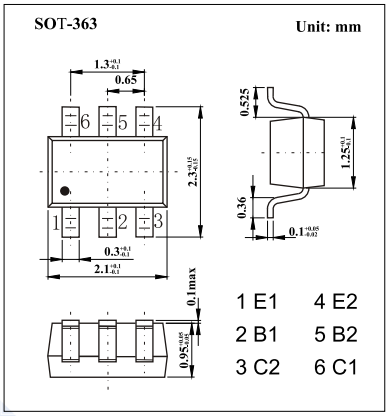
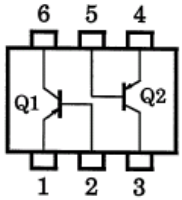
PNP Transistors

HN1A01FU (KN1A01FU)



■ Features

- High voltage and high current
- High h_{FE}: h_{FE} = 120~400
- Excellent hFE linearity
- Small package (Dual type)



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Collector - Base Voltage	V_{CBO}	-50	V
Collector - Emitter Voltage	V_{CEO}	-50	
Emitter - Base Voltage	V_{EBO}	-5	
Collector Current - Continuous	I_C	-150	mA
Base current	I_B	-30	
Collector Power Dissipation	P_C	200	mW
Junction Temperature	T_J	125	℃
Storage Temperature range	T_{stg}	-55 to 125	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector- base breakdown voltage	V_{CBO}	I_C= -100 μA, I_E=0	-50			V
Collector- emitter breakdown voltage	V_{CEO}	I_C= -1 mA, I_B=0	-50			
Emitter - base breakdown voltage	V_{EBO}	I_E= -100 μ A, I_C=0	-5			
Collector-base cut-off current	I_{CBO}	V_{CB}= -50 V , I_E=0			-100	nA
Emitter cut-off current	I_{EBO}	V_{EB}= -5V , I_C=0			-100	
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=-100 mA, I_B=-10mA			-0.3	V
Base - emitter saturation voltage	$V_{BE(sat)}$	I_C=-100 mA, I_B=-10mA			-1.2	
DC current gain	h_{FE}	V_{CE}= -6V, I_C= -2mA	120		400	
Collector output capacitance	C_{ob}	V_{CB}= -10V, I_E= 0,f=1MHz			7	pF
Transition frequency	f_T	V_{CE}= -10V, I_C= -1mA	80			MHz

■ Classification of h_{fe}

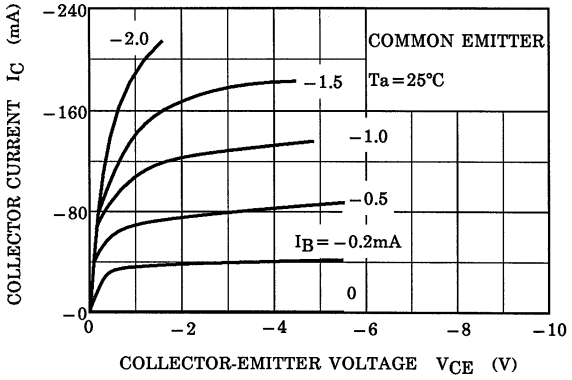
Type	HN1A01FU-Y	HN1A01FU-G
Range	120-240	200-400
Marking	D1Y	D1G

PNP Transistors

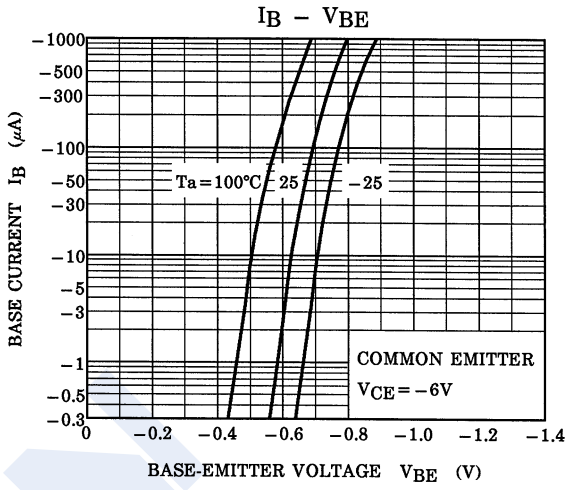
HN1A01FU (KN1A01FU)

■ Typical Characterisitics

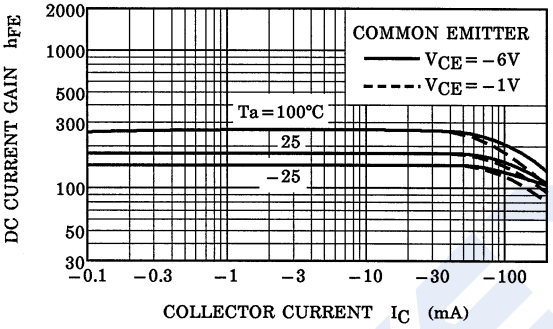
I_C – V_{CE}



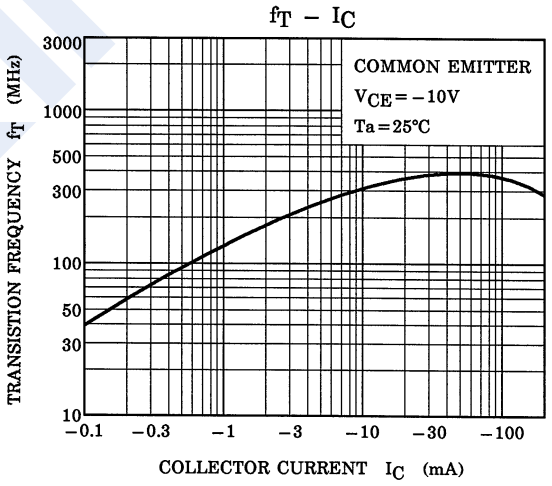
I_B – V_{BE}



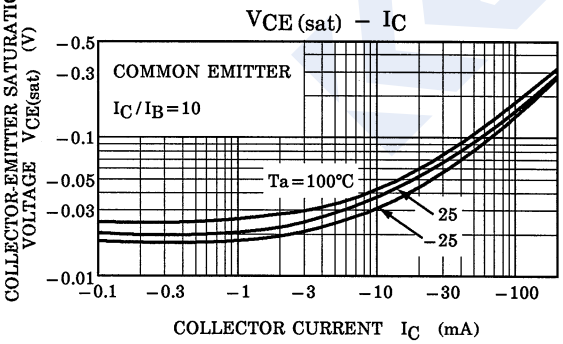
h_{FE} – I_C



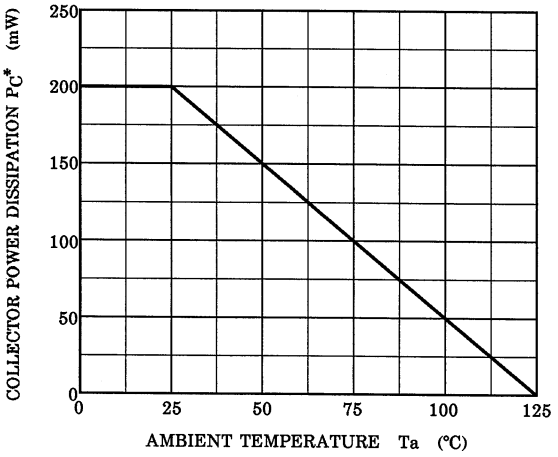
f_T – I_C



$V_{CE\,(sat)}$ – I_C



P_C* – Ta



*: Total Rating

$V_{BE\,(sat)}$ – I_C