

FEATURES

for general purpose, high volt

As complementary types the NPN transistors 2N5551 are recommended.

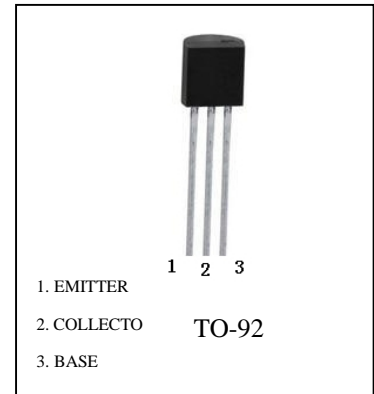
Low current(max. 600mA),High voltage(max.160V)

MARKING:2N5401

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

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	-160	V
Collector-Emitter Voltage	V_{CEO}	-150	V
Emitter-Base Voltage	V_{EBO}	-6	V
Collector Current -Continuous	I_C	-600	mA
Collector Power Dissipation	P_C	625	mW
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55-150	°C

2N5401 (PNP)



ELECTRICAL CHARACTERISTICS (Tamb=25 °C unless otherwise specified)

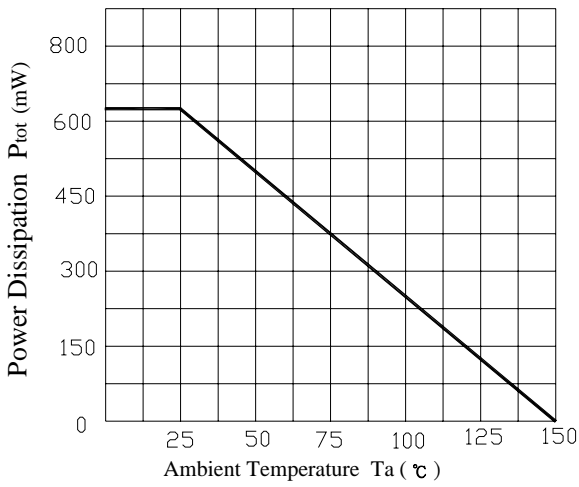
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V_{CBO}	$I_C = -100\mu A, I_E = 0$	-160			V
Collector-emitter breakdown voltage	V_{CEO}	$I_C = -1 mA, I_B = 0$	-150			V
Emitter-base breakdown voltage	V_{EBO}	$I_E = -10\mu A, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -120 V, I_E = 0$			-50	nA
Emitter cut-off current	I_{EBO}	$V_{EB} = -3 V, I_C = 0$			-50	nA
DC current gain	$h_{FE(1)}$	$V_{CE} = -5 V, I_C = -1 mA$	80			
	$h_{FE(2)}$	$V_{CE} = -5 V, I_C = -10 mA$	60		300	
	$h_{FE(3)}$	$V_{CE} = -5 V, I_C = -50 mA$	50			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -50 mA, I_B = -5 mA$			-0.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = -50 mA, I_B = -5 mA$			-1	V
Transition frequency	f_T	$V_{CE} = -5 V, I_C = -10 mA, f = 30 MHz$	100		300	MHz

CLASSIFICATION OF HFE

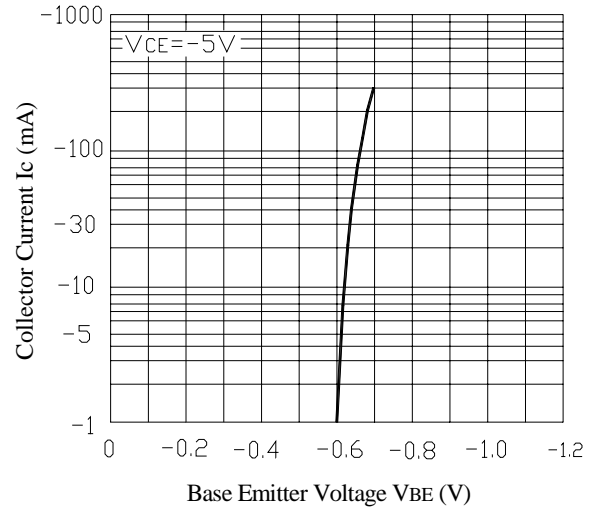
Rank	A	B	C
Range	100-150	150-200	200-300

2N5401 Typical Characteristics

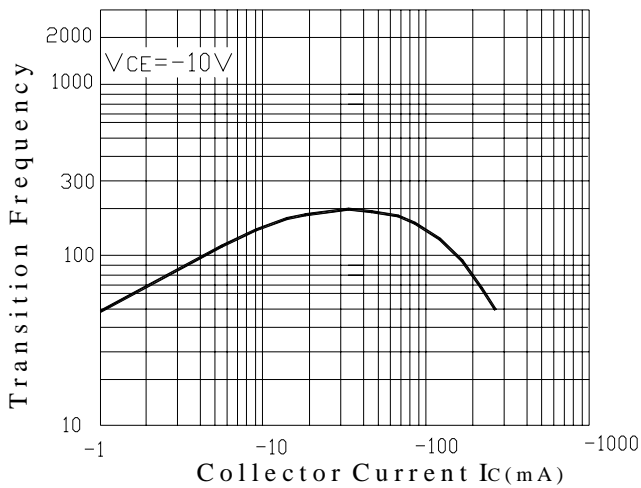
$P_{tot} - T_a$



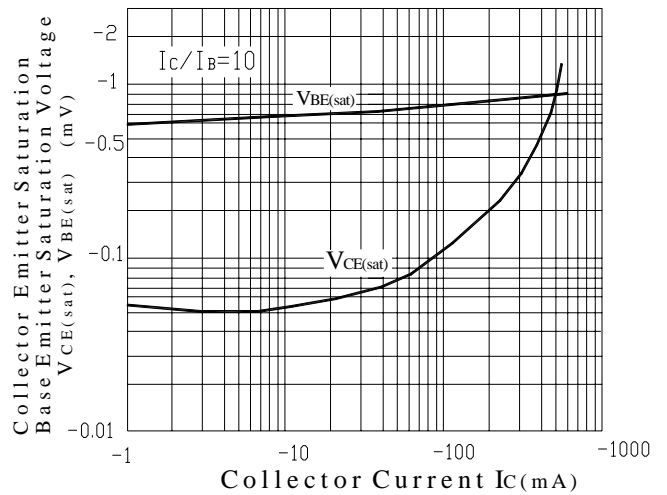
$I_C - V_{BE}$



$f_T - I_C$



$V_{CE(sat)}, V_{BE(sat)} - I_C$



$C_{ob} - V_{CB}$

