

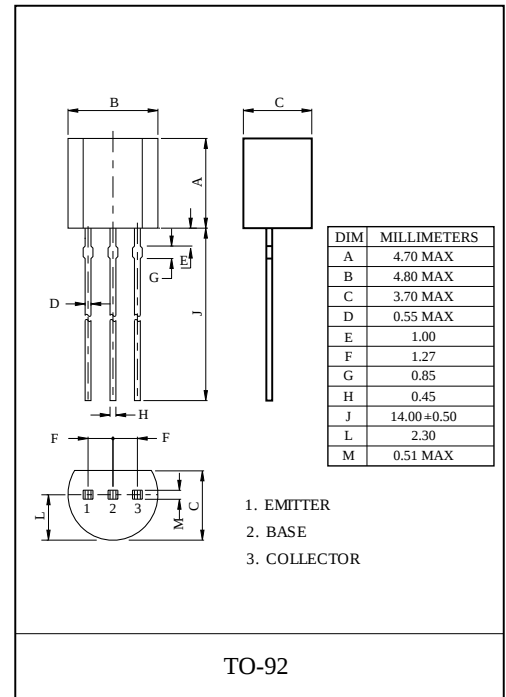
2N5401 TRANSISTOR (PNP)

FEATURE

- Switching and Amplification in High Voltage
- Applications such as Telephony
- Low Current(Max. 600mA)
- High Voltage(Max.160v)

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

Symbol	Parameter	Value	Unit
V _{CB0}	Collector-Base Voltage	-160	V
V _{CE0}	Collector-Emitter Voltage	-150	V
V _{EBO}	Emitter-Base Voltage	-5	V
I _C	Collector Current -Continuous	-0.6	A
P _C	Collector Power Dissipation	0.625	W
T _j	Junction Temperature	150	°C
T _{stg}	Storage Temperature	-55-150	°C

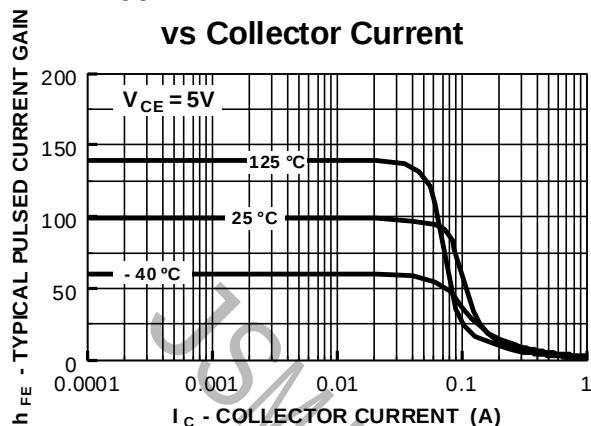


ELECTRICAL CHARACTERISTICS (T_a=25°C unless otherwise specified)

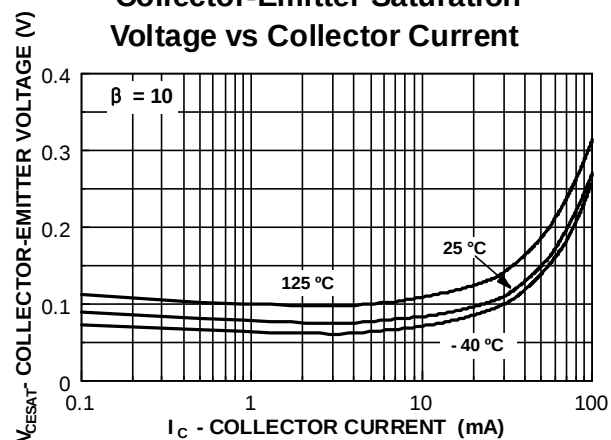
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	V _{(BR)CBO}	I _C = -100μA, I _E =0	-160			V
Collector-emitter breakdown voltage	V _{(BR)CEO}	I _C = -1mA, I _B =0	-150			V
Emitter-base breakdown voltage	V _{(BR)EBO}	I _E = -10μA, I _C =0	-5			V
Collector cut-off current	I _{CBO}	V _{CB} = -120 V, I _E =0			-50	nA
Emitter cut-off current	I _{EBO}	V _{EB} = -3V, I _C =0			-50	nA
DC current gain	h _{FE(1)}	V _{CE} = -5V, I _C =-1 mA	80			
	h _{FE(2)}	V _{CE} = -5V, I _C = -10 mA	60		300	
	h _{FE(3)}	V _{CE} = -5V, I _C =-50 mA	50			
Collector-emitter saturation voltage	V _{CE(sat)}	I _C = -50mA, I _B = -5 mA			-0.5	V
Base-emitter saturation voltage	V _{BE(sat)}	I _C = -50mA, I _B = -5 mA			-1	V
Transition frequency	f _T	V _{CE} =-5V, I _C =-10mA f =30MHZ	100		300	MHz

Typical Characteristics

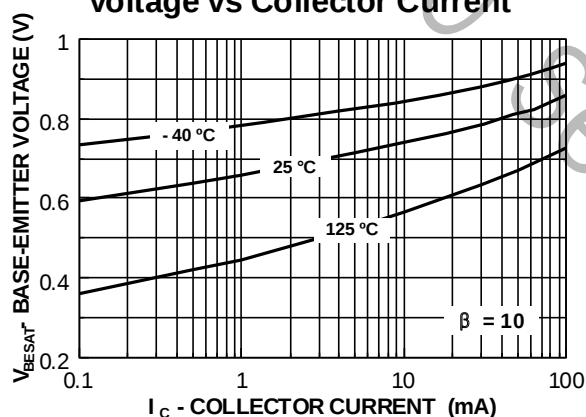
**Typical Pulsed Current Gain
vs Collector Current**



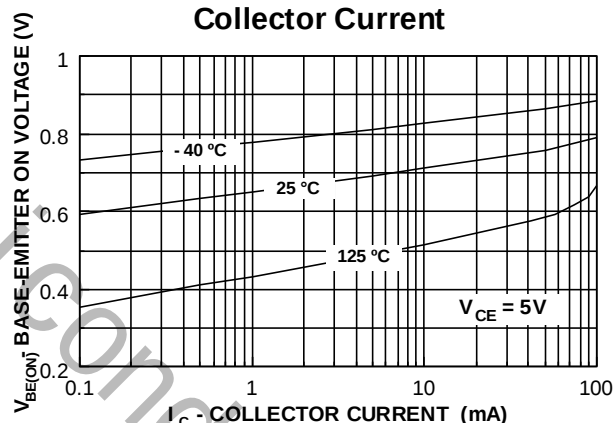
**Collector-Emitter Saturation
Voltage vs Collector Current**



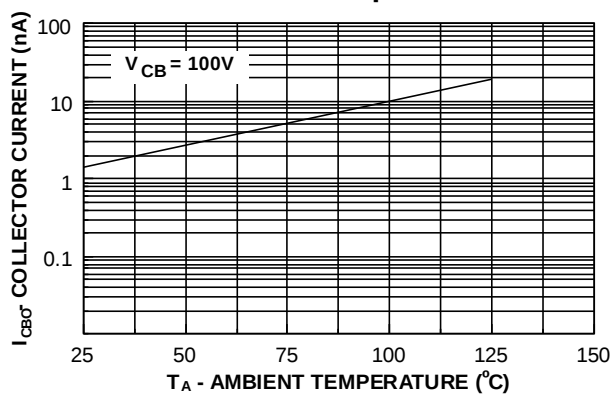
**Base-Emitter Saturation
Voltage vs Collector Current**



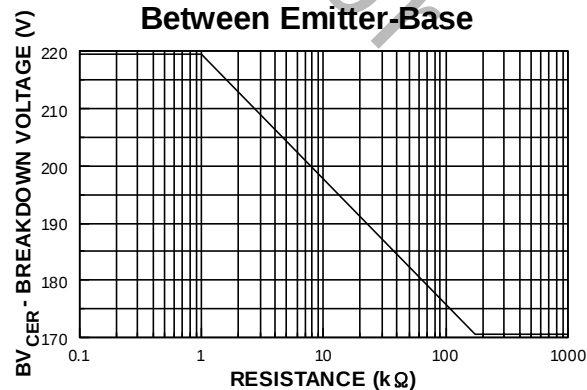
**Base-Emitter ON Voltage vs
Collector Current**



**Collector-Cutoff Current
vs Ambient Temperature**

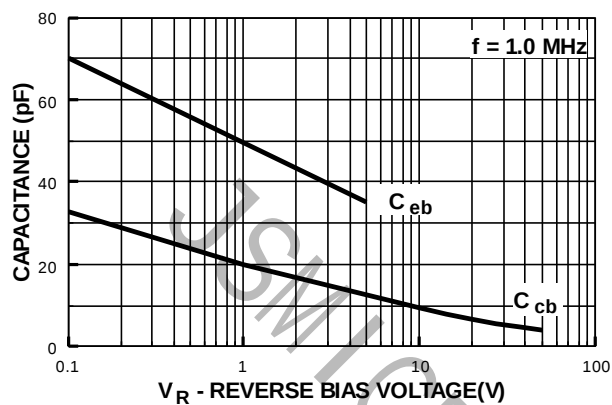


**Collector-Emitter Breakdown
Voltage with Resistance
Between Emitter-Base**



Typical Characteristics (continued)

**Input and Output Capacitance
vs Reverse Voltage**



**Power Dissipation vs
Ambient Temperature**

