TO-92 Plastic-Encapsulate Transistors

2N4401 TRANSISTOR（ NPN ）

FEATURES

Power dissipation

P_{CM}: 0.625 W（Tamb=25℃）

Collector current

I_{CM}: 0.6 A

Collector-base voltage

$V_{(BR)CBO}$: 60 V

Operating and storage junction temperature range

T_J，T_{stg}: -55℃ to +150℃

TO—92

1.EMITTER

2.BASE

3. COLLECTOR

1 2 3

ELECTRICAL CHARACTERISTICS（Tamb=25℃ unless otherwise specified）

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V(BR)_{CBO}$	Ic=100μA, I_E=0	60			V
Collector-emitter breakdown voltage	$V(BR)_{CEO}$	Ic=1mA，I_B=0	40			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E=100μA，I_C=0	6			V
Collector cut-off current	I_{CBO}	V_{CB}=35V, I_E=0			0.1	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=1mA	40			
DC current gain	$H_{FE(2)}$	V_{CE}=1V, I_C=10mA	80			
DC current gain	$H_{FE(3)}$	V_{CE}=1V, I_C=150mA	100		300	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=150mA, I_B=15mA			0.4	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=150mA, I_B=15mA			0.95	V
Transition frequency	f_T	V_{CE}=10V, I_C=20mA f=100MHz	250			MHz

CLASSIFICATION OF HFE

Rank	1	2	3
Range	80-150	150-200	200-300