2N2222

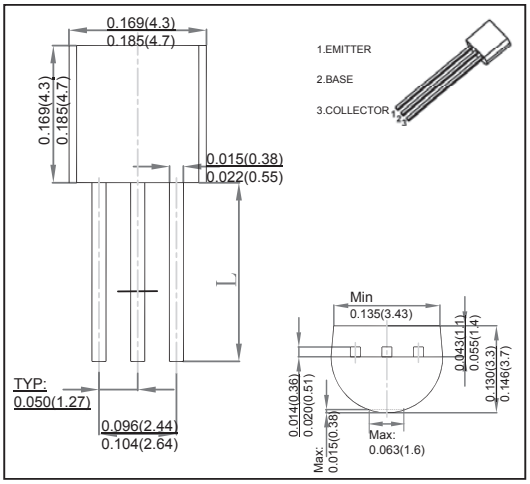
TO-92 Plastic-Encapsulate Transistors

FEATURES

- ●Switching and amplification in high voltage
- ●Applications such as telephony
- ●Low current
- ●High voltage
- ●NPN Transistors

MECHANICAL DATA

- ●Case style:TO-92 molded plastic
- ●Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Rating	Unit
Collector-base voltage	V_{CBO}	60	V
Collector-emitter voltage	V_{CEO}	30	V
Emitter-base voltage	V_{EBO}	5	V
Collector current-continuous	I_C	0.6	A
Collector Power Dissipation	Pc	625	mW
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	200	℃/ W
Junction temperature	T_J,	150	℃
Storage temperature	Tstg	-55 to+150	℃

Parameter	Symbol	Testconditons	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C = 0.01mA, I_E = 0	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C = 10 mA , I_B = 0	30			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E = 10 μA , I_C = 0	5			V
Collector cutoff current	I_{CBO}	V_{CB} = 500 V, I_E = 0			0.01	uA
Emitter cutoff current	I_{EBO}	V_{EB} = 4 . 0 V , I_C = 0			0.1	uA
DC current gain	h_{FE}	IC =1.0mA, VCE =10V	100		300	
		IC =0.1mA, VCE = 10 V	35			
		IC =500mA, VCE =10V	30			
Collector-emitter saturation voltage	$V_{CE(sat)}$	IC =500mA, IB = 50 mA			1.0	V
Base-emitter saturation voltage *	$V_{BE(sat)}$	IC =500mA, IB =50mA			2.0	V
		I_C =50 mA, I_B = 5 mA			1.0	
Transiston frequency	f_T	V_{CE}=20V,I_C=20mA,f=100MHz	250			MHz
Collector output capacitance	Cob	V_{CB}=10V,I_E=0,f=100MHz			8	pF
Delay time	Td	Vcc=30V,V_{BE}=-0.5V			10	ns
Rise time	Tr	IC=150mA.I_{B1}=15mA			25	ns
Storage time	Ts	VCC=30V,IC=150mA			225	ns
Fall time	Tf	IB1=IB2=15mA			60	ns

* Pulse Test: Pulse Width ≦ 300 us, Duty Cycle≦2.0%.