3DD13001

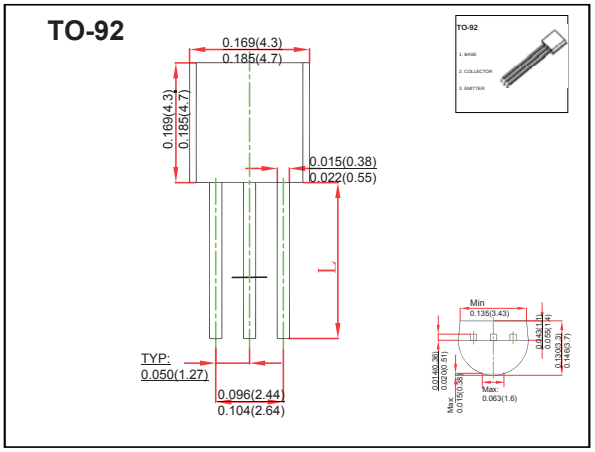
TO-92 Plastic-Encapsulate Transistors

Features

- power switching applications
- TRANSISTOR (NPN)

MECHANICAL DATA

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



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Symbl	Parameter	Value	Unit
V_{CBO}	Collector-Base Voltage	600	V
V_{CEO}	Collector-Emitter Voltage	400	V
V_{EBO}	Emitter-Base Voltage	9	V
I_C	Collector Current-Continuous	0.2	A
P_C	Collector Power Dissipation	0.75	W
T_j	Junction Temperature	150	℃
T_{stg}	Storage Temperature	-55-150	℃

Electrical Specification(T_A=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Typ	M ax	Unit
Collector-base breakdown voltage	$V(BR)_{CBO}$	I_C= 100uA, I_E=0	600			V
Collector-emitter breakdown voltage *	$V(BR)_{CEO}$	I_C= 1mA, I_B=0	400			V
Emitter-base breakdown voltage	$V(BR)_{EBO}$	I_E= 100uA, I_C=0	9			V
Collector cut-off current	I_{CBO}	V_{CB}=600V, I_E=0			10	uA
Collector cut-off current	I_{CEO}	V_{CE}= 400V, I_B=0			10	uA
Emitter cut-off current	I_{EBO}	V_{EB}=9V, I_C=0			10	uA
	$h_{FE(2)}$	V_{CE}=5V, I_C=20mA	10			
	$h_{FE(3)}$	V_{CE}= 20V, I_C=20mA	10		40	
	$h_{FE(4)}$	V_{CE}=10V, I_C=0.25mA	5			
Collector-emitter saturation voltage	$V_{CE(sat)}$	I_C=50mA, I_B=10mA			1	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=50mA, I_B=10mA			1.2	V
Transition frequency	f_T	V_{CE}=20V ,I_C=20mA,f=1MHZ	8			MHZ
Fall time	t_f	I_C=0.1A, UI9600			1	us
Storage time	t_S				3	us