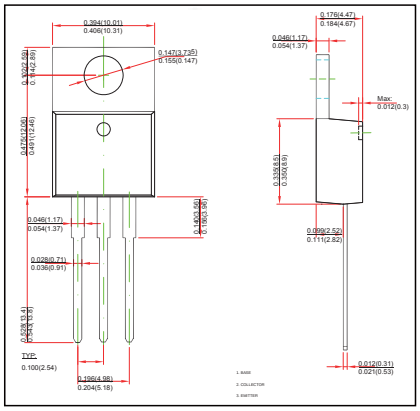
TO-220 Plastic-Encapsulate Transistors

FEATURES

- Power switching applications
- Good high temperature
- Low saturation voltage
- High speed switching
- TRANSISTOR(NPN)

MECHANICAL DATA

- Case style:TO-220L molded plastic
- Mounting position:any



MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector-Base Voltage	V_{CBO}	700	V
Collector-Emitter Voltage	V_{CEO}	420	V
Emitter-Base Voltage	V_{EBO}	9	V
Collector Current -Continuous	I_C		A
Collector Power Dissipation	P_C	2	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	62.5	℃/ W
Junction Temperature	T_j	150	℃
Storage Temperature	T_{stg}	-55-150	℃

Electrical Specification (T_A=25°C unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$					V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$					V
Emitter-base breakdown voltage	$V_{(BR)EBO}$					V
Collector cut-off current	I_{CBO}	V_{CB}=700V,I_E=0				μA
Collector cut-off current	I_{CEO}	V_{CE}=400V,I_B=0				μA
Emitter cut-off current	I_{EBO}					μA
DC current gain	$h_{FE(1)}$	V_{CE}=5V, I_C=1A			40	
	$h_{FE(2)}$	V_{CE}=5V, I_C=200mA				
	$h_{FE(3)}$	V_{CE}=5V, I_C=10mA				
	$h_{FE(4)}$	V_{CE}=5V, I_C=4A				
Collector-emitter saturation voltage	$V_{CE(sat)(1)}$				0.3	V
			0.15 0.25		0.28 0.35	V V
	$V_{CE(sat)(3}$				0.8	V
Base-emitter saturation voltage	$V_{BE(sat)}$				1.6	V
Diode forward voltage	V_{FEC}	I_C=2A			2	V
Transition frequency	f_T	V_{CE}=10V, I_C=0.5A,f=1MHz	5			MHz
Rise time	t_r	I_C=250mA			0.5	
Storage time		I_C=250mA				μs
Fall time	t_f	I_C=250mA			0.5	