

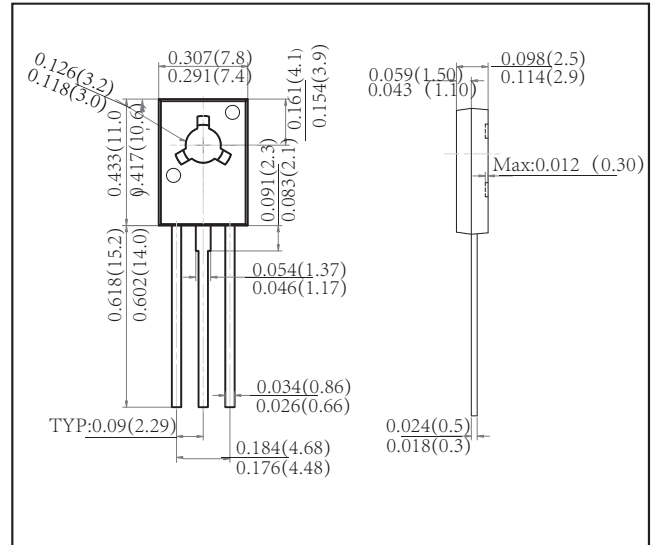
TO-18 Plastic-Encapsulate Transistors

FEATURES

- High Current
- TRANSISTOR (NPN)
- Complement To BD136, BD138 And BD140

MECHANICAL DATA

- Case style:TO-18 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}	45	V
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	45	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	1.5	A
Collector Power Dissipation	P_C	1.25	W
Thermal Resistance From Junction To Ambient	$R_{\theta JA}$	100	°C/W
Junction Temperature	T_J	150	°C
Storage Temperature	T_{stg}	-55~+150	°C

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_E = 0$	45			V
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 0.1\text{mA}, I_E = 0$	60			V
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C = 0.03\text{A}, I_B = 0$	45			V
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C = 0.03\text{A}, I_B = 0$	60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 0.1\text{mA}, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 30\text{V}, I_E = 0$			0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5\text{V}, I_C = 0$			10	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = 2\text{V}, I_C = 150\text{mA}$	40		250	
DC current gain	$h_{FE(2)}$	$V_{CE} = 2\text{V}, I_C = 5\text{mA}$	25			
DC current gain	$h_{FE(3)}$	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$	25			
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 500\text{mA}, I_B = 50\text{mA}$			0.5	V
Base-emitter voltage	V_{BE}	$V_{CE} = 2\text{V}, I_C = 500\text{mA}$			1	V

* Pulse test: pulse width $\leq 350\mu\text{s}$, duty cycles $\leq 2.0\%$.

RATINGS AND CHARACTERISTIC CURVES

