

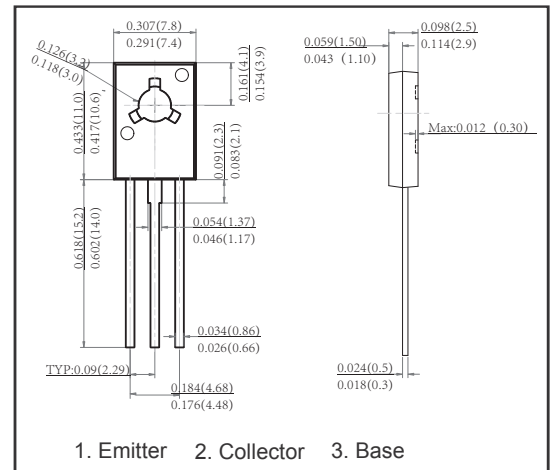
## TO-126 Plastic-Encapsulate Transistors

### FEATURES

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

### MECHANICAL DATA

- Case style: TO-126 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
		60	
Collector-Emitter Voltage	$V_{CEO}$	45	V
		60	
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
			60			
Collector-emitter sustaining voltage	$V_{CEO(SUS)}$	$I_C=0.03\text{A}, I_B=0$	45			V
			60			
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	$\mu\text{A}$
Emitter cut-off current	$I_{EBO}$	$V_{EB}=5\text{V}, I_C=0$			10	$\mu\text{A}$
DC current gain	$h_{FE(1)}$	$V_{CE}=2\text{V}, I_C=150\text{mA}$	40		250	
	$h_{FE(2)}$	$V_{CE}=2\text{V}, I_C=5\text{mA}$	25			
	$h_{FE(3)}$	$V_{CE}=2\text{V}, I_C=500\text{mA}$	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

