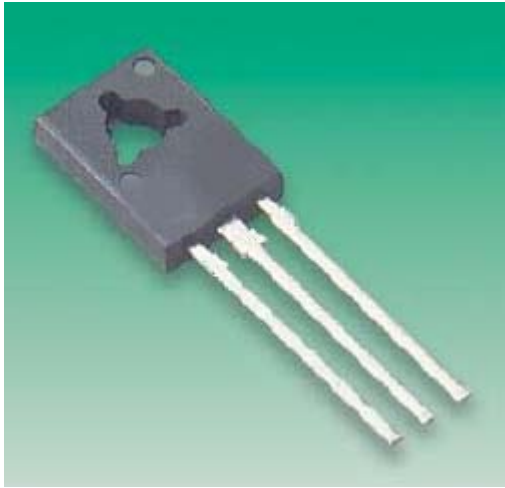


# BD237

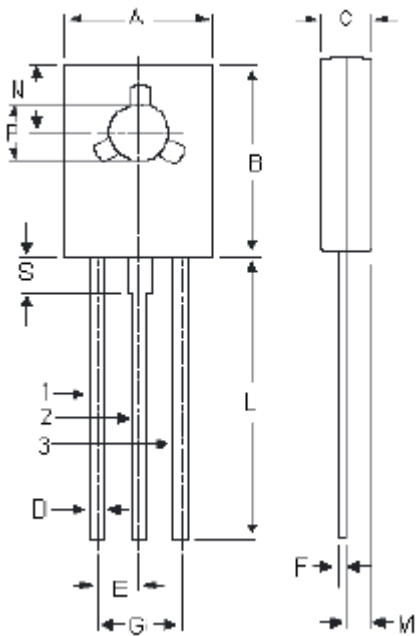
## Medium Power Transistors



### Features:

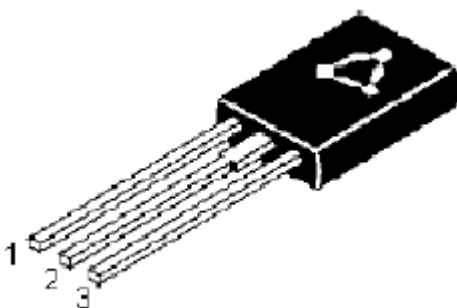
- Epitaxial Silicon Power Transistors.
- Intended for Use in Medium Power Linear Switching Applications.

### TO-126 Plastic Package



Dimensions	Minimum	Maximum
A	7.4	7.8
B	10.5	10.8
C	2.4	2.7
D	0.7	0.9
E	2.25 (Typical)	
F	0.49	0.75
G	4.5 (Typical)	
L	15.7 (Typical)	
M	1.27 (Typical)	
N	3.75 (Typical)	
P	3.0	3.2
S	2.5 (Typical)	

Dimensions : Millimetres



### Pin Configuration:

1. Emitter
2. Collector
3. Base



### Absolute Maximum Ratings

Description	Symbol	BD237	Unit
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	80	
Collector Emitter Voltage ( $R_{BE} = 1K$ )	$V_{CER}$	100	
Emitter Base Voltage	$V_{EBO}$	5.0	
Collector Current	$I_C$	2.0	A
Collector Peak Current	$I_{CM}$	6.0	
Power Dissipation at $T_C = 25^\circ C$ Derate above $25^\circ C$	PD	25	W
Power Dissipation at $T_a = 25^\circ C$		1.25 10	W mW/ $^\circ C$
Operating and Storage Junction Temperature Range	$T_j, T_{stg}$	-65 to +150	$^\circ C$
<b>Thermal Characteristics</b>			
Junction to Case	$R_{th(j-c)}$	100	$^\circ C/W$
Junction to Ambient in Free Air	$R_{th(j-a)}$	4.16	

### Electrical Characteristics ( $T_C = 25^\circ C$ Unless Specified Otherwise)

Description	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Collector Cut off Current	$I_{CBO}$	$V_{CB} = 100V, I_E = 0$	-	-	100	$\mu A$
		$T_C = 150^\circ C$	-	-	2.0	mA
Collector Emitter Sustaining Voltage	$*V_{CEO(sus)}$	$V_{CB} = 100V, I_E = 0$	-	-	-	V
		$I_C = 0.1A, I_B = 0$	80	-	-	
Collector Emitter Saturation Voltage	$*V_{CEO(sat)}$	$I_C = 1.0A, I_B = 0.1A$	-	-	0.6	
Base Emitter Voltage	$*V_{BE(on)}$	$I_C = 1.0A, V_{CE} = 2V$	-	-	1.3	
DC Current Gain	$*h_{FE}$	$I_C = 150mA, V_{CE} = 2V$	40	-	-	-
		$I_C = 1.0A, V_{CE} = 2V$	25	-	-	-
Current Gain Bandwidth Product	$f_T$	$I_C = 250mA, V_{CE} = 10V$	3	-	-	MHz
$*h_{FE1}/h_{FE2}$	Matched Pairs	$I_C = 250mA, V_{CE} = 2V$	-	1.6	-	-

\*Pulse Test : Pulse Width = 300 $\mu s$ , Duty Cycle = 1.5%.

# BD237

## Medium Power Transistors



### Specifications

$I_C$ Maximum (A)	$V_{CEO}$ Maximum (V)	$h_{FE}$ Minimum at $I_C = 1A$	$P_{tot}$ at 25°C (W)	Package	Type	Part Number
2	80	25	26	TO-126	NPN	BD237

# BD237

## Medium Power Transistors



### Notes:

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