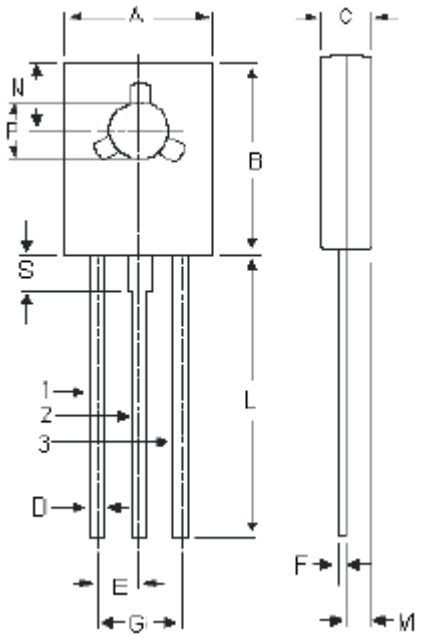
BD237

Medium Power Transistors

Features:

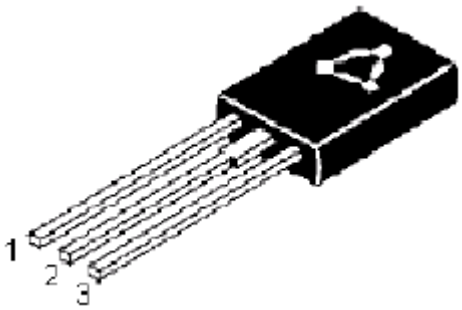
- Epitaxial Silicon Power Transistors.
- Intended for Use in Medium Power Linear Switching Applications.

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

BD237

Medium Power Transistors

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°C Derate above 25°C	P_D	25	W
Power Dissipation at T_a = 25°C		1.25 10	W mW/°C
Operating and Storage Junction Temperature Range	T_j, T_{stg}	-65 to +150	°C
Thermal Characteristics			
Junction to Case	$R_{th\ (j\text{-}c)}$	100	°C/W
Junction to Ambient in Free Air	$R_{th\ (j\text{-}a)}$	4.16	

Electrical Characteristics (T_C = 25°C Unless Specified Otherwise)

Description	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Collector Cut off Current	I_{CBO}	V_{CB} = 100V, I_E = 0 T_C = 150°C V_{CB} = 100V, I_E = 0	-	-	100 2.0	µA mA
Emitter Cut off Current	I_{EBO}	V_{EB} = 5V, I_C = 0	-	-	1.0	mA
Collector Emitter Sustaining Voltage	*$V_{CEO\ (sus)}$	I_C = 0.1A, I_B = 0	80	-	-	V
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 I_C = 1.0A, V_{CE} = 2V	40 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 = 300µs, 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:

International Sales Offices:

AUSTRALIA – Farnell
Tel No: ++61 1300 361 005
Fax No: ++61 1300 361 225

FINLAND – Farnell
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411

ITALY – Farnell
Tel No: ++ 39 02 93 995 200
Fax No: ++ 39 02 93 995 300

SPAIN – Farnell
Tel No: 901 20 20 80
Fax No: 901 20 20 90

AUSTRIA – Farnell
Tel No: ++ 43 662 2180 680
Fax No: ++ 43 662 2180 670

FRANCE – Farnell
Tel No: ++ 33 474 68 99 99
Fax No: ++ 33 474 68 99 90

MALAYSIA – Farnell-Newark
Tel No: ++ 60 3 7873 8000
Fax No: ++ 60 3 7873 7000

SWEDEN – Farnell
Tel No: ++ 46 8 730 50 00
Fax No: ++ 46 8 83 52 62

BELGIUM – Farnell
Tel No: ++ 32 3 475 2810
Fax No: ++ 32 3 227 3648

GERMANY – Farnell
Tel No: ++ 49 89 61 39 39 39
Fax No: ++ 49 89 613 59 01

NETHERLANDS – Farnell
Tel No: ++ 31 30 241 7373
Fax No: ++ 31 30 241 7333

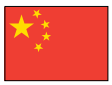
SWITZERLAND – Farnell
Tel No: ++ 44 204 64 64
Fax No: ++ 44 204 64 54

BRAZIL – Farnell-Newark
Tel No: ++ 55 11 4066 9400
Fax No: ++ 55 11 4066 9410

HONG KONG – Farnell-Newark
Tel No: ++ 852 2268 9888
Fax No: ++ 852 2268 9899

NEW ZEALAND – Farnell
Tel No: 0800 90 80 80
Fax No: 0800 90 80 81

UK – Farnell
Tel No: ++ 44 8701 200 200
Fax No: ++ 44 8701 200 201

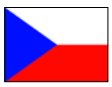


CHINA – Farnell-Newark
Tel No: ++86 10 6238 5152
Fax No: ++86 10 6238 5022

HUNGARY - Farnell
Tel No: ++ 44 870 1200 208
Fax No: ++ 44 870 1200 209

NORWAY – Farnell
Tel No: 800 146 70
Fax No: 800 146 76

UK – CPC
++ 44 8701 202 530
++ 44 8701 202 531



CZECH REPUBLIC - Farnell
Tel No: ++ 44 870 1200 208
Fax No: ++ 44 870 1200 209

INDIA - Farnell
Tel No: ++ 44 870 1200 208
Fax No: ++ 44 870 1200 209

PORTUGAL – Farnell
Tel No: ++ 34 93 475 8804
Fax No: ++ 34 93 474 5288

USA – Newark
Tel No: 800 463 9275

DENMARK – Farnell
Tel No: ++ 45 44 53 66 44
Fax No: ++ 45 44 53 66 06

IRELAND – Farnell
Tel No: ++ 353 1 830 9277
Fax No: ++ 353 1 830 9016

RUSSIA – Farnell
Tel No: ++ 44 870 1200 208
Fax No: ++ 44 870 1200 209

EXPORT – Farnell
Tel No: ++ 44 8701 200 208
Fax No: ++ 44 8701 200 209
For enquiries from all other markets

ESTONIA – Farnell
Tel No: ++ 358 9 560 7780
Fax No: ++ 358 9 345 5411

ISRAEL – Farnell
Tel No: ++ 180 937 0015
Fax No: ++ 180 937 0014

SINGAPORE – Farnell-Newark
Tel No: ++ 65 6788 0200
Fax No: ++ 65 6788 0300

http://www.farnell.com
http://www.newark.com
http://www.cpc.co.uk