

Continental Device India Limited

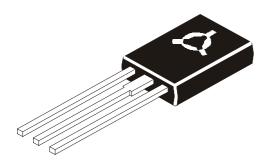
An IS/ISO 9002 and IECQ Certified Manufacturer





NPN PLASTIC MEDIUM POWER SILICON TRANSISTORS

BD157, BD158 TO-126



Designed For Power Output Stages for Television, Radio, Phonograph And Other Consumer Applications.

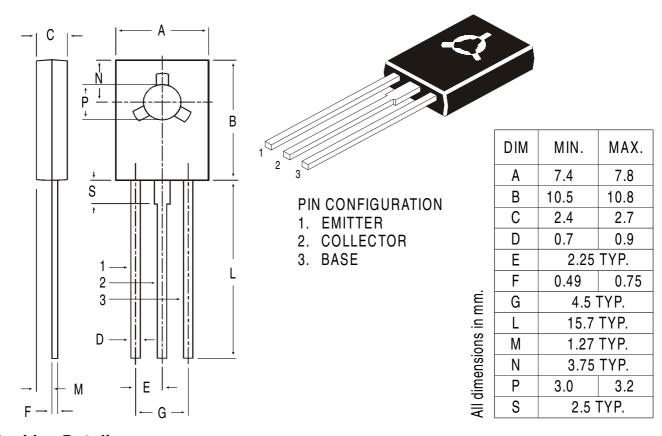
ABSOLUTE MAXIMUM RATINGS

| DESCRIPTION | SYMBOL | BD157 | BD158 | UNIT |
|---------------------------------|-----------|-------|-------------|----------|
| Collector -Emitter Voltage | VCEO | 250 | 300 | V |
| | | | | V |
| Collector -Base Voltage | VCBO | 275 | 325 | |
| Emitter Base Voltage | VEBO | | 5.0 | V |
| Collector Current Continuous | IC | | 0.5 | Α |
| Peak | IC | | 1.0 | Α |
| Base Current | IB | | 0.25 | Α |
| Power Dissipation @ Ta=25 deg C | PD | | 2.0 | W |
| @ Tc=25 deg C | | | 20 | W |
| Derate Above =25 deg C | | | 0.16 | mW/deg C |
| Operating & Storage Junction | Tj, Tstg | | -65 to +150 | deg C |
| Temperature Range | | | | |
| THERMAL RESISTANCE | | | | |
| Junction to Case | Rth (j-c) | | 6.25 | deg C/W |

ELECTRICAL CHARACTERISTICS (Tc=25 deg C unless specified)

| DESCRIPTION | SYMBOL TEST CONDITION | | MIN | MAX | UNIT | |
|---------------------------------------------|-----------------------|-----------------------------|-------|-----|------|-----|
| Collector-Emitter Sustaining Voltage | VCEO | IC=1mA, IB=0 | BD157 | 250 | - | V |
| | | | BD158 | 300 | - | V |
| Collector-Base Voltage | VCBO | IC=100uA, IE=0 | BD157 | 275 | - | V |
| | | | BD158 | 325 | - | V |
| Emitter Base Voltage | VEBO | IE=1mA, IC=0 | | 5.0 | - | V |
| Collector Cut-off Current | ICBO | VCB=275V, IE=0 | BD157 | - | 100 | uA |
| | | VCB=325V, IE=0 | BD158 | - | 100 | uA |
| Emitter Cut-off Current | IEBO | VBE=5V,IC=0 | | - | 100 | uA |
| DC Current Gain | hFE | IC=50mA,VCE=10V | | 30 | 240 | |
| Collector Emitter Saturation Voltage | VCESAT | IC=50mA, IB=5mA | | - | 1.0 | V |
| Base Emitter Saturation Voltage | VBESAT | IC=50mA, IB=5mA | | - | 1.0 | V |
| Current-Gain-Bandwidth Product | ft | IC=10mA, VCE=10V f=5 MHz | | 15 | - | MHz |
| Output Capacitance | Cob | VCB=20V, f=1MHz | | Тур | 10 | pF |

TO-126 (SOT-32) Plastic Package



Packing Detail

| PACKAGE | STANDARD PACK | | INNER CARTON BOX | | OUTER CARTON BOX | | |
|---------|-----------------|----------------|------------------|------|-------------------|-------|--------|
| | Details | Net Weight/Qty | Size | Qty | Size | Qty | Gr Wt |
| T0-126 | 500 pcs/polybag | 340 gm/500 pcs | 3" x 7.5" x 7.5" | 2.0K | 17" x 15" x 13.5" | 32.0K | 31 kgs |

Disclaimer

The product information and the selection guides facilitate selection of the CDIL's Discrete Semiconductor Device(s) best suited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished on the CDIL Web Site/CD is believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Discrete Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems or applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

CDIL strives for continuous improvement and reserves the right to change the specifications of its products without prior notice.



CDIL is a registered Trademark of

Continental Device India Limited

C-120 Naraina Industrial Area, New Delhi 110 028, India.

Telephone + 91-11-579 6150 Fax + 91-11-579 9569, 579 5290

e-mail sales@cdil.com www.cdil.com

This datasheet has been downloaded from:

www. Data sheet Catalog.com

Datasheets for electronic components.