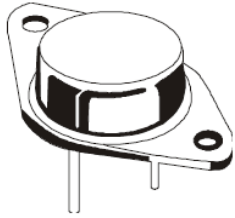


NPN-POWER TRANSISTOR

BDY55
TO-3
Metal Can Package



ABSOLUTE MAXIMUM RATING

PARAMETER	SYMBOL	VALUE	UNITS
Collector-base voltage (open emitter)	V_{CBO}	100	V
Collector-base voltage (open base)	V_{CEO}	60	V
Emitter-base voltage (open collector)	V_{EBO}	7	V
Collector current	I_C	15	A
Base current	I_B	7	A
Total power dissipation up to $T_C=25^\circ\text{C}$	P_{tot}	117	W
Junction temperature	T_J	200	$^\circ\text{C}$
Storage temperature	T_{stg}	-65 to 200	$^\circ\text{C}$

THERMAL RESISTANCE

PARAMETER	SYMBOL	VALUE	UNITS
from junction to case	$R_{th\ J-C}$	1.5	$^\circ\text{C/W}$



Continental Device India Pvt. Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company

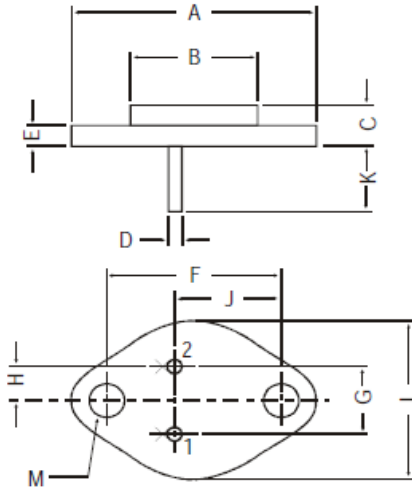


ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$ unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	VALUE		UNITS
			MIN	MAX	
Collector-emitter cut-off current	I_{CEO}	$V_{CE}=30\text{V}, I_B=0$	-	0.7	mA
Collector cut-off current	I_{CEV}	$V_{CE}=100\text{V}, V_{BE}=1.5\text{V}$	-	5	mA
		$V_{CE}=100\text{V}, V_{BE}=1.5\text{V}, T_C=150^\circ\text{C}$	-	30	mA
Emitter cut-off current	I_{EBO}	$I_C=0, V_{EB}=7\text{V}$	-	5	mA
Collector -emitter sustaining voltage	$V_{CEO(sus)}^*$	$I_C=0.2\text{A}, I_B=0$	60	-	V
Collector-base voltage	V_{CBO}	$I_C=1\text{mA}, I_E=0$	100	-	V
Emitter-base voltage	V_{EBO}	$I_E=1\text{mA}, I_C=0$	7	-	V
Collector-emitter saturation voltage	V_{CEsat}^*	$I_C=4\text{A}, I_B=0.4\text{A}$	-	1.1	V
		$I_C=10\text{A}, I_B=3.3\text{A}$	-	2.5	V
Base emitter on voltage	$V_{BE(on)}^*$	$I_C=4\text{A}, V_{CE}=4\text{V}$	-	1.8	V
D.C. Current gain	h_{FE}^*	$I_C=4\text{A}, V_{CE}=4\text{V}$	20	70	
		$I_C=10\text{A}, V_{CE}=4\text{V}$	10	-	
Transition frequency	f_T	$I_C=1\text{A}, V_{CE}=4\text{V}$	10	-	MHz

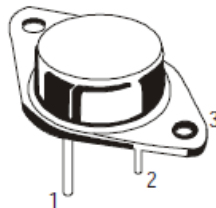
* Pulsed: pulse duration $\leq 350\ \mu\text{s}$; duty factor = 2%

TO-3 Metal Can Package



DIM	MIN.	MAX.
A	—	39.37
B	—	22.22
C	6.35	8.50
D	0.96	1.09
E	—	1.77
F	29.90	30.40
G	10.69	11.18
H	5.20	5.72
J	16.64	17.15
K	11.15	12.25
L	—	26.67
M	3.84	4.19

All dimensions in mm.



PIN CONFIGURATION

1. BASE
2. EMITTER
3. COLLECTOR

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-3	100 pcs/pkt	1.3 kg/100 pcs	12.5" x 8" x 1.8"	0.1K	17" x 11.5" x 21"	2K	27.5 kgs



Continental Device India Pvt. Limited

An ISO/TS 16949, ISO 9001 and ISO 14001 Certified Company



Customer Notes:

Component Disposal Instructions

1. CDIL Semiconductor Devices are RoHS compliant, customers are requested to please dispose as per prevailing Environmental Legislation of their Country.
2. In Europe, please dispose as per EU Directive 2002/96/EC on Waste Electrical and Electronic Equipment (WEEE).

DISCLAIMER

The product information and the selection guides facilitate selection of the CDIL's 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 in the Data Sheet and 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 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 Pvt. Limited
C-120 Naraina Industrial Area, New Delhi 110 028, India.
Telephone + 91-11-2579 6150, 4141 1112 Fax + 91-11-2579 5290, 4141 1119
email@cdil.com www.cdil.com
CIN No. U32109DL1964PTC004291