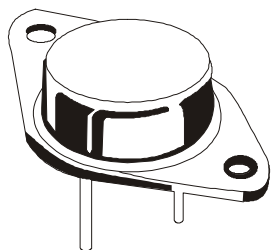


## SILICON PLANAR POWER TRANSISTORS

**CDN055 NPN**  
**CDP055 PNP**

**TO-3**  
**Metal Can Package**



### ABSOLUTE MAXIMUM RATINGS

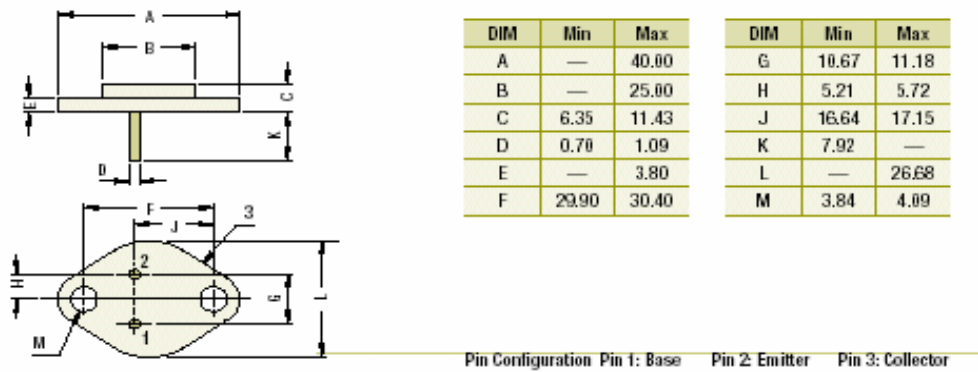
DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	$V_{CBO}$	50	V
Collector Emitter Voltage	$V_{CEO}$	50	V
Emitter Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	10	A
Power Dissipation at $T_c=25^\circ\text{C}$	$P_D$	57.5	W
Operating and Storage Junction Temperature Range	$T_J, T_{stg}$	- 65 to +200	$^\circ\text{C}$

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

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Emitter Voltage	$*V_{CEO}$	$I_C=100\text{mA}, I_B=0$	50		V
Collector Cut Off Current	$I_{CBO}$	$V_{CB}=50\text{V}, I_E=0$		0.2	mA
Emitter Cut Off Current	$I_{EBO}$	$V_{BE}=6\text{V}, I_C=0$		1.0	mA
Collector Cut Off Current	$I_{CEO}$	$V_{CE}=50\text{V}, I_B=0$		1.0	mA
DC Current Gain	$*h_{FE}$	$I_C=2\text{A}, V_{CE}=2\text{V}$	25	100	
Collector Emitter Saturation Voltage	$*V_{CE(sat)}$	$I_C=2\text{A}, I_B=200\text{mA}$		1.0	V
Base Emitter on Voltage	$*V_{BE(on)}$	$I_C=2\text{A}, V_{CE}=2\text{V}$		1.2	V
Second Breakdown Collector Current with Base Forward Biased	$IS/b$	$V_{CE}=20\text{V}, t=1.0\text{ s, Nonrepetitive}$	2.87		A

\*Pulse Test: Pulse Width  $\leq 300\text{ms}$ , Duty Cycle  $\leq 2\%$

TO-3 Metal Can Package



... Packaging Specifications

Package / Case Type	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
		Qty	Qty	Size L x W x H	Gross Weight	Qty	Size L x W x H	Gross Weight
				(cm)	(Kg)		(cm)	(Kg)
Metal Can Packages								
TO-3	Bulk	100	0.1K	32 x 20 x 4.5	1.4	1.6K	43 x 40 x 35	22.3

**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).

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CDIL is a registered Trademark of  
Continental Device India 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

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