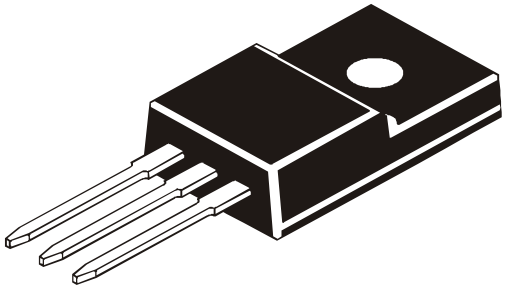
NPN SILICON PLASTIC POWER DARLINGTON TRANSISTOR

CFD811
(9AW)
TO-220FP



MARKING : CFD 811

Designed for Relay Drive and Motor Drive

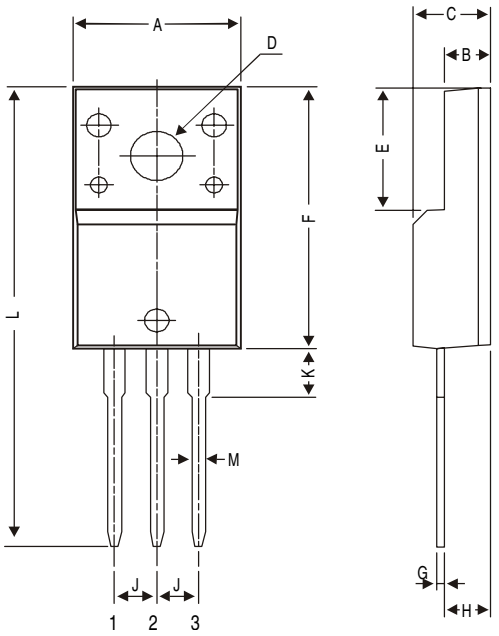
ABSOLUTE MAXIMUM RATINGS(Ta=25deg C)

DESCRIPTION	SYMBOL	VALUE	UNIT
Collector -Base Voltage	VCBO	110	V
Collector -Emitter Voltage	VCEO	110	V
Emitter Base Voltage	VEBO	5.0	V
Collector Current	IC	8.0	A
t=50ms	ICP	12	A
Base Current	IB	1.0	A
Collector Power Dissipation @ Ta=25 deg C	PC	2.0	W
Collector Power Dissipation @ Tc=25 deg C		60	W
Junction Temperature	Tj	150	deg C
Storage Temperature Range	Tstg	-55 to +150	deg C

ELECTRICAL CHARACTERISTICS (Ta=25 deg C Unless Specified)

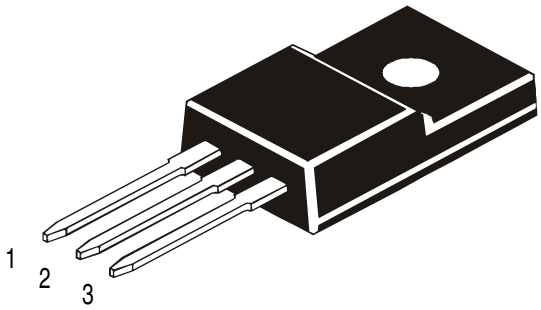
DESCRIPTION	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Collector Emitter Voltage	VCEO	IC=5mA, IB=0	110	-	-	V
Collector -Base Voltage	VCBO	IC=50uA, IE=0	110	-	-	V
Emitter Base Voltage	VEBO	IE=5mA, IC=0	5.0	-	-	V
Collector Cut off Current	ICBO	VCB=110V, IE=0	-	-	100	uA
Emitter Cut off Current	IEBO	VEB=5V,IC=0	-	-	3.0	mA
Collector Emitter Saturation Voltage	VCE(Sat)	IC=5A,IB=5mA	-	-	2.5	V
DC Current Gain	hFE	IC=2A, VCE=3V	1.0	-	20	K
		IC=8A, VCE=3V	1.0	-	-	K
Dynamic Characteristics						
Transition Frequency	ft	VCE=5V,IC=0.2A, f=10MHz	-	40	-	MHz
Collector Output Capacitance	Cob	VCB=10V, IE=0 f=1MHz	-	70	-	pF

TO-220FP (Fully Isolated) Plastic Package



All diminsions in mm.

DIM	MIN	MAX
A	9.96	10.36
B	2.60	3.00
C	4.50	4.90
D	3.10	3.30
E	7.90	8.20
F	16.87	17.27
G	0.45	0.50
H	2.56	2.96
J	2.34	2.74
K	—	3.08
L	—	30.05
M	—	0.80



PIN CONFIGURATION

1. BASE
2. COLLECTOR
3. EMITTER

Packing Detail

PACKAGE	STANDARD PACK		INNER CARTON BOX		OUTER CARTON BOX		
	Details	Net Weight/Qty	Size	Qty	Size	Qty	Gr Wt
TO-220 / FP	200 pcs/polybag	396 gm/200 pcs	3" x 7.5" x 7.5"	1.0K	17" x 15" x 13.5"	16.0K	36 kgs
	50 pcs/tube	120 gm/50 pcs	3.5" x 3.7" x 21.5"	1.0K	19" x 19" x 19"	10.0K	29 kgs

Notes

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).

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