



Continental Device India Limited

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



PNP LOW VOLTAGE FAST SWITCHING POWER TRANSISTOR

2CF2325



Pin Configuration

1= BASE
2= COLLECTOR
3= Emitter

SOT-89
Plastic Package

Marking- CDIL

2CF2325

For Emergency Lighting, Led, CCFL drivers (back Lighting), Voltage Regulation and Relay driver Applications

ABSOLUTE MAXIMUM RATINGS

DESCRIPTION	SYMBOL	VALUE	UNITS
Collector Base Voltage	V_{CBO}	25	V
Collector Emitter Voltage	V_{CEO}	25	V
Emitter Base Voltage	V_{EBO}	6.0	V
Collector Current	I_C	3.0	A
Collector Peak Current ($t_p < 5\text{ms}$)	I_{CM}	5.0	A
Base Current	I_B	0.2	A
Base Peak Current ($t_p < 5\text{ms}$)	I_{BM}	0.4	A
Total Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	1.4	W
Storage Temperature	T_{stg}	- 65 to 150	°C
Max. Operating Junction Temperature	T_j	150	°C

THERMAL RESISTANCE

Junction to Ambient	$^*R_{th(j-amb)}$	89	°C/W
---------------------	-------------------	----	------

*Device mounted on a PCB area of 1 cm²

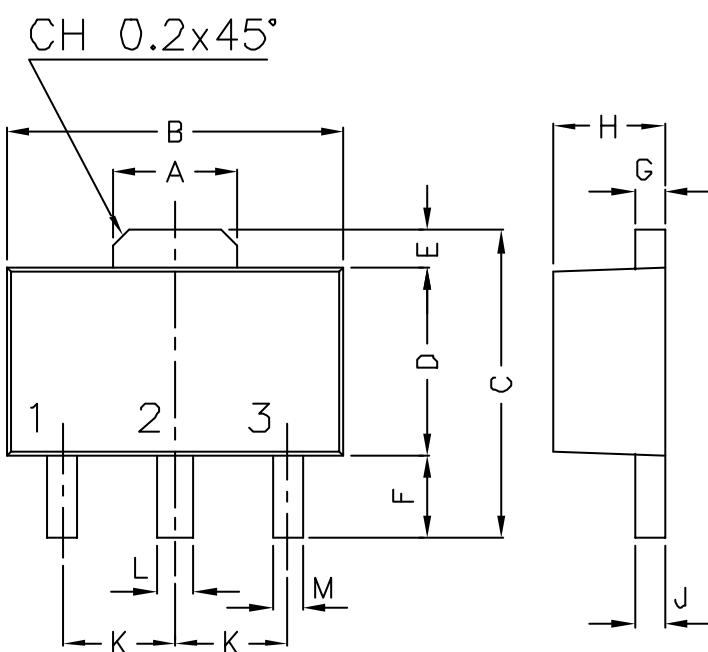
ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless specified otherwise)

DESCRIPTION	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
Collector Cut off Current	I_{CBO}	$V_{CB}=20\text{V}$, $I_E=0$		100	nA
Emitter Cut off Current	I_{EBO}	$V_{EB}=6\text{V}$, $I_C=0$		100	nA
Base Emitter on Voltage	$^*V_{BE(on)}$	$I_C=100\text{mA}$, $V_{CE}=2\text{V}$	0.63	0.73	V
Collector Emitter Saturation Voltage	$^*V_{CE(sat)}$	$I_C=2\text{A}$, $I_B=100\text{mA}$ $I_C=3\text{A}$, $I_B=150\text{mA}$		0.32 0.500	V
Base Emitter Saturation Voltage	$^*V_{BE(sat)}$	$I_C=2\text{A}$, $I_B=100\text{mA}$		1.20	V
DC Current Gain	$^*h_{FE}$	$I_C=3\text{A}$, $V_{CE}=2\text{V}$	120		

*Pulse Width=300μs, Duty Cycle ≤1.5%

2CF2325Rev260507E

PACKAGE SOT-89



PIN CONFIGURATION

1. BASE
2. COLLECTOR
3. Emitter

ALL DIMENSIONS ARE IN mm

DIM	MIN.	TYP.	MAX.
A	1.64	—	1.66
B	4.30	—	4.70
C	3.90	—	4.30
D	2.30	—	2.70
E	—	0.50	—
F	—	1.10	—
G	—	0.40	—
H	1.30	—	1.70
J	0.35	—	0.50
K	—	1.50	—
L	0.40	—	0.60
M	0.30	—	0.50

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 are 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 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@cdil.com www.cdilsemi.com

2CF2325Rev260507E