



Continental Device India Limited

An ISO/TS16949 and ISO 9001 Certified Company

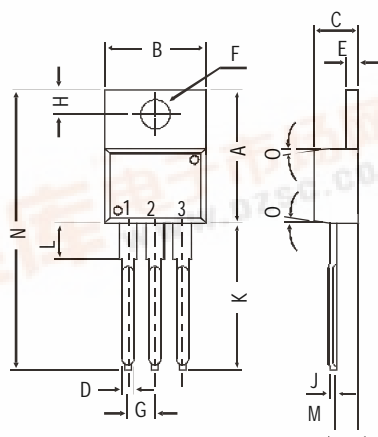
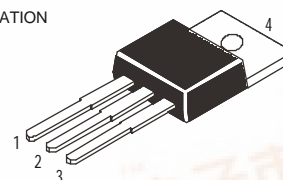


TO-220 Plastic Package

CSA614, CSD288

CSA614 **PNP PLASTIC POWER TRANSISTOR**
CSD288 **NPN PLASTIC POWER TRANSISTOR**
Low frequency Power Amplifier and Power Regulator

PIN CONFIGURATION
 1. BASE
 2. COLLECTOR
 3. EMITTER
 4. COLLECTOR



All dimensions in mm.

DIM	MIN.	MAX.
A	14.42	16.51
B	9.63	10.67
C	3.56	4.83
D		0.90
E	1.15	1.40
F	3.75	3.88
G	2.29	2.79
H	2.54	3.43
J		0.56
K	12.70	14.73
L	2.80	4.07
M	2.03	2.92
N		31.24
O	DEG 7	

ABSOLUTE MAXIMUM RATINGS

Collector-base voltage (open emitter)
 Collector-emitter voltage (open base)
 Collector current
 Total power dissipation up to $T_C = 25^\circ\text{C}$
 Junction temperature
 Collector-emitter saturation voltage
 $I_C = 1\text{ A}; I_B = 0.1\text{ A}$
 D.C. current gain
 $I_C = 0.5\text{ A}; V_{CE} = 5\text{ V}$

	614	288
V_{CBO}	max. 80	80 V
V_{CEO}	max. 55	55 V
I_C	max. 3.0	A
P_{tot}	max. 25	W
T_j	max. 150	$^\circ\text{C}$
V_{CEsat}	max. 0.5	1.0 V
h_{FE}	min. 40	
	max. 240	

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

Limiting values

Collector-base voltage (open emitter)
 Collector-emitter voltage (open base)
 Emitter-base voltage (open collector)

	614	288
V_{CBO}	max. 80	80 V
V_{CEO}	max. 55	55 V
V_{EBO}	max. 5.0	V

CSA614, CSD288

Collector current	I_C	max.	3.0	A
Total power dissipation up to $T_C = 25^\circ\text{C}$	P_{tot}	max.	25	W
Junction temperature	T_j	max.	150	$^\circ\text{C}$
Storage temperature	T_{stg}		-65 to +150	$^\circ\text{C}$

CHARACTERISTICS

$T_{amb} = 25^\circ\text{C}$ unless otherwise specified

			614	288
Collector cutoff current				
$I_E = 0; V_{CB} = 50\text{V}$	I_{CBO}	max.	50	μA
Breakdown voltages				
$I_C = 10\text{ mA}; I_B = 0$	V_{CEO}	min.	55	V
$I_C = 500\text{ }\mu\text{A}; I_E = 0$	V_{CBO}	min.	80	V
$I_E = 500\text{ }\mu\text{A}; I_C = 0$	V_{EBO}	min.	5.0	V
Saturation voltage				
$I_C = 1\text{ A}; I_B = 0.1\text{ A}$	V_{CEsat}	max.	0.5	1.0 V
D.C. current gain				
$I_C = 0.5\text{A}; V_{CE} = 5\text{V}^{**}$	h_{FE}	min.	40	
		max.	240	

**** h_{FE} classification: R: 40-80 O: 70-140 Y: 120-240**

Customer 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 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 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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