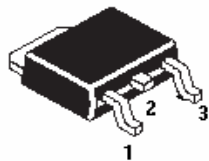


3-TERMINAL POSITIVE VOLTAGE REGULATOR**CL7808DT****TO-252 (DPAK)
Plastic Package**

Pin: 1 Input
2 Ground
3 Output

The voltages available allow these Regulators to be used in Logic Systems, Instrumentation, Hi-Fi Audio Circuits and other Solid State Electronic Equipment

ABSOLUTE MAXIMUM RATINGS (T_a=25°C)

| DESCRIPTION | SYMBOL | VALUE | UNIT |
|--------------------------------------|------------------|--------------|------|
| Input Voltage | V _{IN} | 35 40 | V |
| Power Dissipation | P _D | 5 | W |
| Operating Junction Temperature Range | T _j | +150 | °C |
| Storage Temperature Range | T _{stg} | - 65 to +150 | °C |

THERMAL RESISTANCE

| | | | |
|---------------------------------|----------------------|-----|------|
| Junction to Ambient in free air | R _{th(j-a)} | 92 | °C/W |
| Junction to Case | R _{th(j-c)} | 5.0 | °C/W |

ELECTRICAL CHARACTERISTICS (T_a=25°C unless specified otherwise)V_{IN}=15V, I_O=100mA, T_a=25°C

| DESCRIPTION | SYMBOL | TEST CONDITION | MIN | TYP | MAX | UNIT |
|-----------------------------|------------------|---|------|-------|-----|-------|
| Output Voltage | V _O | I _O =5mA ~ 1.5A V _{IN} =10.5 ~ 23V, P _D 15W | 7.7 | | 8.3 | V |
| Line Regulation | R _{EGV} | V _{IN} =10.5 ~ 25V | | | 80 | mV |
| Load Regulation | R _{EGL} | I _O =5mA ~ 1.5A | | | 80 | mV |
| Quiescent Current | I _Q | | | | 8.0 | mA |
| Quiescent Current Change | I _Q | V _{IN} =10.5 ~ 25V | | | 1.0 | mA |
| | | I _O =5mA ~ 1A | | | 0.5 | mA |
| Input Voltage | V _{IN} | | 10.5 | | 25 | V |
| Ripple Rejection Ratio | R _R | V _{IN} =11.5 ~ 21.5V, f=120Hz | 58 | | | dB |
| Max Output Current | I _{OM} | T _J =25°C | | 2.2 | | A |
| Output Voltage Drift | V _T | I _O =5mA, T _J =0 ~ 125°C | | - 0.4 | | mV/°C |
| Output Noise Voltage | V _{NO} | f=10Hz ~ 100KHz | | 10 | | μV |
| Short Circuit Current Limit | I _{SC} | T _J =25°C | | 2.0 | | A |

MARKING

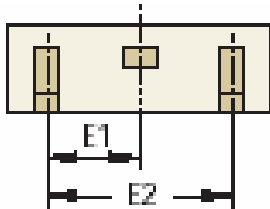
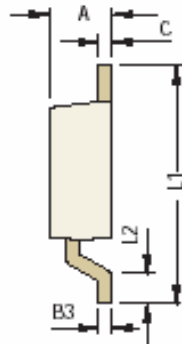
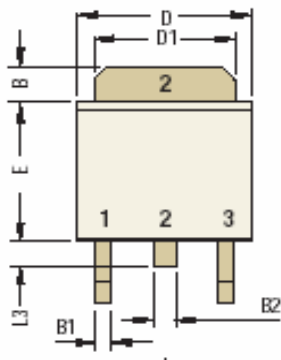
CL
7808DT
XY MX

XY= Date Code

CL7808DT

TO-252 (DPAK)
Plastic Package

Package TO-252 (DPAK)



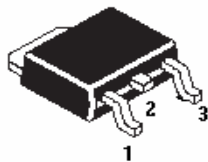
| DIM | Min | max |
|-----|------|------|
| A | 2.20 | 2.40 |
| B | 1.30 | 1.50 |
| B1 | 0.55 | 0.65 |
| B2 | 0.75 | 0.85 |
| B3 | 0.46 | 0.58 |
| C | 0.46 | 0.58 |
| D | 6.40 | 6.60 |
| D1 | 5.20 | 5.40 |
| E | 5.40 | 5.60 |
| E1 | 2.25 | 2.35 |
| E2 | 4.50 | 4.70 |
| L1 | 9.25 | 9.75 |
| L2 | 0.50 | |
| L3 | 0.90 | 1.10 |

All Dimensions are in mm

et4U.com

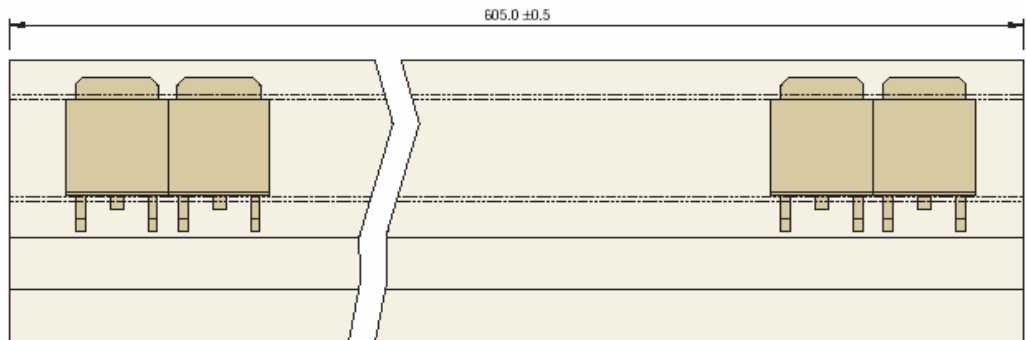
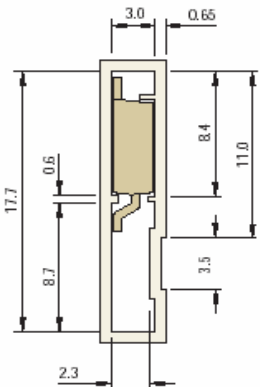
DataSheet4U.com

DataShee



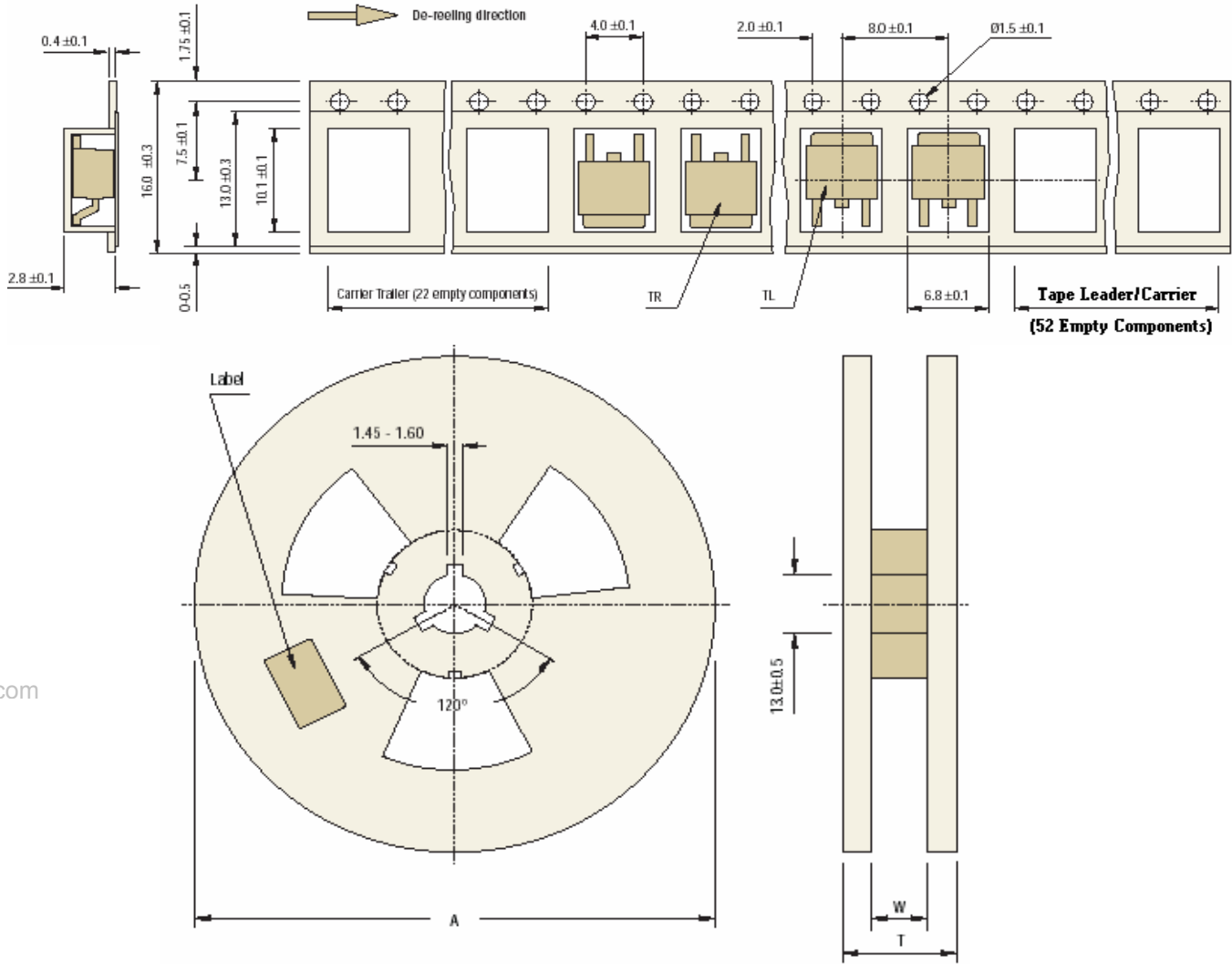
Pin: 1 Input
2 Ground
3 Output

TO-252 (DPAK) Tube Packing



Qty: 80 pcs/Tube

TO-252 (DPAK) Tape and Reel Specification



Reel Specifications

| Package | Tape Width | Reel Dia. A - Max | Devices Per Reel and MOQ | Inside Thickness W | Reel Thickness T - max |
|---------------|------------|----------------------|--------------------------|-----------------------|---------------------------|
| TO-252 (DPAK) | 16 | 330 | 2,500 | 17.5 ± 1.5 | 24.0 |

All Dimensions are in mm

Packaging Information

| Package/ Case Type | Packaging Type | Std. Packing Qty |
|-----------------------|----------------|------------------|
| TO-252 (DPAK) | Tube | 1,600 |
| TO-252 (DPAK) | T & R | 2,500 |

T & R: Tape and Reel
Tube : 80 pcs/Tube

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, 5141 1112 Fax + 91-11-2579 5290, 5141 1119

email@cdil.com www.cdilsemi.com