

Features

- Maximum output current I_{OM}: 1A
- Output voltage V_O: 5V
- Continuous total dissipation P_D : 1.5 W (T_a = 25°C)



Maximum Ratings (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|------------------|----------|------|
| Input Voltage | Vi | 35 | V |
| Thermal Resistance from Junction to Air | $R_{\theta JA}$ | 66.7 | °C/W |
| Operating Junction Temperature Range | T _{OPR} | -25~+125 | °C |
| Storage Temperature Range | T _{STG} | -65~+150 | °C |

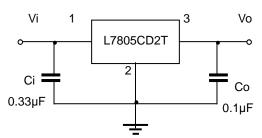
Electrical Characteristics(Ta=25°C unless otherwise specified)

(Vi=10V, Io=500mA, Ci=2.2 μ F, Co=1 μ F, unless otherwise specified)

| Parameter | Symbol | Test conditions | | Min | Тур | Max | Unit |
|--------------------------|--------|--------------------------------|----------|------|------|------|-------|
| Output voltage | Vo | | 25℃ | 4.8 | 5.0 | 5.2 | V |
| | | 7V≤V i≤20V, Io=5mA-1A | -25-125℃ | 4.75 | 5.00 | 5.25 | V |
| Load Regulation | △Vo | Io=5mA-1A | 25°C | | 9 | 100 | mV |
| | | lo=250mA-750mA | 25℃ | | 4 | 50 | mV |
| Line regulation | △Vo | 7V≤V i≤25V | 25℃ | | 4 | 100 | mV |
| | | 8V≤V _i ≤12V | 25℃ | | 1.6 | 50 | mV |
| Quiescent Current | Iq | | 25℃ | | 5 | 8 | mA |
| Quiescent Current Change | △lq | 7V≤V i≤25V | -25-125℃ | | 0.3 | 1.3 | mA |
| | | 5mA≤I _O ≤1A | -25-125℃ | | 0.03 | 0.5 | mA |
| Output Noise Voltage | V_N | 10Hz≤f≤100KHz | 25℃ | | 42 | | μV/Vo |
| Output voltage drift | △Vo/△T | I _O =5mA | -25-125℃ | | -1.1 | | mV/ ℃ |
| Ripple Rejection | RR | 8V≤V _i ≤18V,f=120Hz | -25-125℃ | 62 | 73 | | dB |
| Dropout Voltage | Vd | lo=1A | 25℃ | | 2 | | V |
| Output resistance | Ro | f=1KH _Z | -25-125℃ | | 10 | | mΩ |
| Short Circuit Current | Isc | | 25℃ | | 230 | | mA |
| Peak Current | lpk | | 25℃ | | 2.2 | | Α |

^{*} Pulse test.

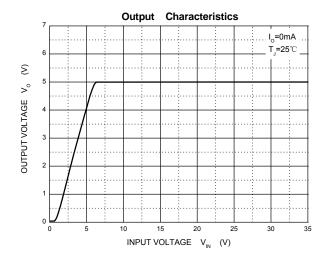
Typical Application

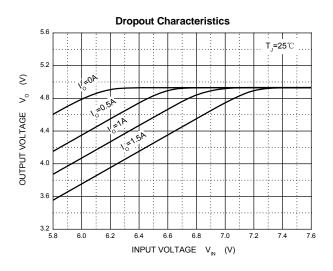


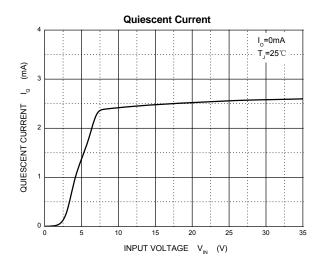
Note: Bypass capacitors are recommended for optimum stability and transient response and should be located as close as possible to the regulators.

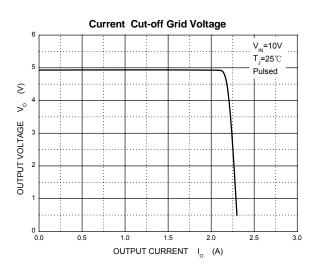


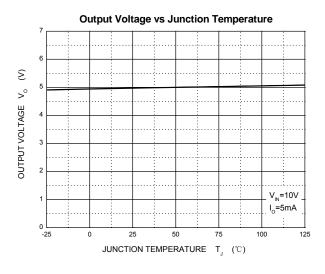
Typical Characteristics

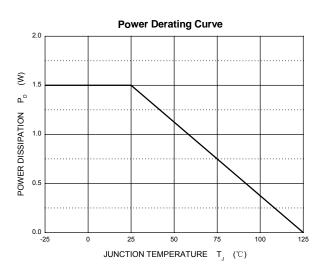






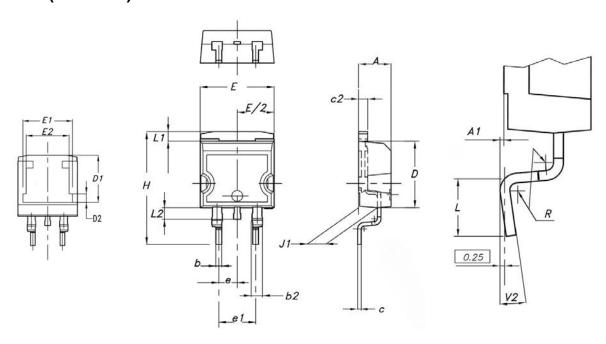








Package Information TO-263S(TO-263-2)



| Dim. | mm | | | | |
|------|------|------|-------|--|--|
| | Min. | Тур. | Max. | | |
| A | 4.40 | | 4.60 | | |
| A1 | 0.03 | | 0.23 | | |
| b | 0.70 | | 0.93 | | |
| b2 | 1.14 | | 1.70 | | |
| С | 0.45 | | 0.60 | | |
| c2 | 1.23 | | 1.36 | | |
| D | 8.95 | | 9.35 | | |
| D1 | 7.50 | 7.75 | 8.00 | | |
| D2 | 1.10 | 1.30 | 1.50 | | |
| E | 10 | | 10.40 | | |
| E1 | 8.50 | 8.70 | 8.90 | | |
| E2 | 6.85 | 7.05 | 7.25 | | |
| е | | 2.54 | | | |
| e1 | 4.88 | | 5.28 | | |
| Н | 15 | | 15.85 | | |
| J1 | 2.49 | | 2.69 | | |
| L | 2.29 | | 2.79 | | |
| L1 | 1.27 | | 1.40 | | |
| L2 | 1.30 | | 1.75 | | |
| R | | 0.4 | | | |
| V2 | 0° | | 8° | | |



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