

Pb Free Plating Product

## TSD78xxE



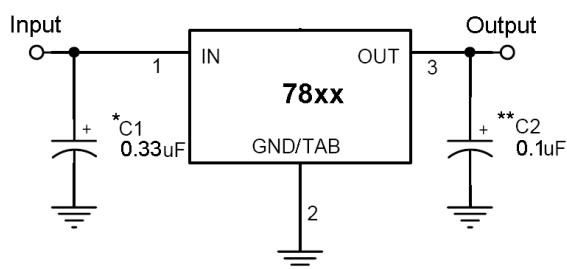
1 Ampere Surface Mount Positive Three Terminal Voltage Regulators

**Features**

- Output Voltage Range 5 to 24V
- Output current up to 1A
- No external components required
- Internal thermal overload protection
- Internal short-circuit current limiting
- Output transistor safe-area compensation
- Output voltage offered in 4% tolerance



DPAK/TO-252

**Standard Application Circuit**

A common ground is required between the input and the output voltages. The input voltage must remain typically 2.0V above the output voltage even during the low point on the Input ripple voltage.

XX = these two digits of the type number indicate voltage.

\* = Cin is required if regulator is located an appreciable distance from power supply filter.

\*\* = Co is not needed for stability; however, it does improve transient response.

**Absolute Maximum Rating** ( $T_a = 25^\circ\text{C}$  unless otherwise noted)

| Parameter                                |                            | Symbol         | Limit            | Unit               |
|------------------------------------------|----------------------------|----------------|------------------|--------------------|
| Input Voltage                            | $V_{OUT}=5\sim 18\text{V}$ | $V_{IN}$       | 35               | V                  |
|                                          | $V_{OUT}=24\text{V}$       |                | 40               |                    |
| Output Current                           |                            | $I_{OUT}$      | Internal Limited |                    |
| Power Dissipation                        |                            | $P_D$          | Internal Limited |                    |
| Operating Junction Temperature           |                            | $T_J$          | $0\sim +125$     | $^\circ\text{C}$   |
| Storage Temperature Range                |                            | $T_{STG}$      | $-65\sim +150$   | $^\circ\text{C}$   |
| Thermal Resistance - Junction to Case    | TO-220                     | $R\theta_{JC}$ | 5                | $^\circ\text{C/W}$ |
|                                          | TO-252                     |                | 5                |                    |
| Thermal Resistance - Junction to Ambient | TO-220                     | $R\theta_{JA}$ | 50               | $^\circ\text{C/W}$ |
|                                          | TO-252                     |                | 60               |                    |

**Note:** Absolute maximum ratings are those values beyond which damage to the device may occur.  
Functional operation under these condition is not implied.

## TSD7805E Electrical Characteristics

(Vin=10V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                        | Min  | Typ  | Max  | Unit   |
|-------------------------------------------|---------------------|---------------------------------------|------|------|------|--------|
| Output voltage                            | Vout                | Tj=25°C                               | 4.80 | 5    | 5.20 | V      |
|                                           |                     | 7.5V≤Vin≤20V,<br>10mA≤Iout≤1A, PD≤15W | 4.75 | 5    | 5.25 |        |
| Line Regulation                           | REGline             | Tj=25°C                               | --   | 3    | 100  | mV     |
|                                           |                     | 7.5V≤Vin≤25V                          | --   | 1    | 50   |        |
| Load Regulation                           | REGload             | Tj=25°C                               | --   | 15   | 100  |        |
|                                           |                     | 10mA≤Iout≤1A                          | --   | 5    | 50   |        |
| Quiescent Current                         | Iq                  | Iout=0, Tj=25°C                       | --   | 4.2  | 8    | mA     |
| Quiescent Current Change                  | ΔIq                 | 7.5V≤Vin≤25V                          | --   | --   | 1.3  |        |
|                                           |                     | 10mA≤Iout≤1A                          | --   | --   | 0.5  |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                | --   | 40   | --   | μV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 8V≤Vin≤18V                   | 62   | 78   | --   | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                    | --   | 2    | --   | V      |
| Output Resistance                         | Rout                | f=1KHz                                | --   | 17   | --   | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                               | --   | 750  | --   | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                               | --   | 2.2  | --   | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj          | Iout=10mA, 0°C≤Tj≤125°C               | --   | -0.6 | --   | mV/ °C |

## TSD7806E Electrical Characteristics

(Vin=11V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                        | Min  | Typ  | Max  | Unit   |
|-------------------------------------------|---------------------|---------------------------------------|------|------|------|--------|
| Output Voltage                            | Vout                | Tj=25°C                               | 5.75 | 6    | 6.25 | V      |
|                                           |                     | 8.5V≤Vin≤21V,<br>10mA≤Iout≤1A, PD≤15W | 5.7  | 6    | 6.3  |        |
| Line Regulation                           | REGline             | Tj=25°C                               | --   | 5    | 120  | mV     |
|                                           |                     | 8.5V≤Vin≤25V                          | --   | 1.5  | 60   |        |
| Load Regulation                           | REGload             | Tj=25°C                               | --   | 14   | 120  |        |
|                                           |                     | 10mA≤Iout≤1A                          | --   | 4    | 60   |        |
| Quiescent Current                         | Iq                  | Iout=0, Tj=25°C                       | --   | 4.3  | 8    | mA     |
| Quiescent Current Change                  | ΔIq                 | 8.5V≤Vin≤25V                          | --   | --   | 1.3  |        |
|                                           |                     | 10mA≤Iout≤1A                          | --   | --   | 0.5  |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                | --   | 45   | --   | uV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 9V≤Vin≤19V                   | 59   | 75   | --   | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                    | --   | 2    | --   | V      |
| Output Resistance                         | Rout                | f=1KHz                                | --   | 19   | --   | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                               | --   | 550  | --   | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                               | --   | 2.2  | --   | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ΔTj           | Iout=10mA, 0°C≤Tj≤125°C               | --   | -0.7 | --   | mV/ °C |

- Pulse testing techniques are used to maintain the junction temperature as close to the ambient temperature as possible, and thermal effects must be taken into account separately.
- This specification applies only for DC power dissipation permitted by absolute maximum ratings.

## TSD7808E Electrical Characteristics

(Vin=14V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                         | Min  | Typ  | Max  | Unit   |
|-------------------------------------------|---------------------|----------------------------------------|------|------|------|--------|
| Output voltage                            | Vout                | Tj=25°C                                | 7.69 | 8    | 8.32 | V      |
|                                           |                     | 10.5V≤Vin≤23V,<br>10mA≤Iout≤1A, PD≤15W | 7.61 | 8    | 8.40 |        |
| Line Regulation                           | REGline             | Tj=25°C                                | --   | 6    | 160  | mV     |
|                                           |                     | 10.5V≤Vin≤25V<br>11V≤Vin≤17V           | --   | 2    | 80   |        |
| Load Regulation                           | REGload             | Tj=25°C                                | --   | 12   | 160  |        |
|                                           |                     | 10mA≤Iout≤1A<br>250mA≤Iout≤750mA       | --   | 4    | 80   |        |
| Quiescent Current                         | Iq                  | Iout=0, Tj=25°C                        | --   | 4.3  | 8    | mA     |
| Quiescent Current Change                  | ΔIq                 | 10.5V≤Vin≤25V                          | --   | --   | 1    |        |
|                                           |                     | 10mA≤Iout≤1A                           | --   | --   | 0.5  |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                 | --   | 52   | --   | μV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 11V≤Vin≤21V                   | 56   | 72   | --   | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                     | --   | 2    | --   | V      |
| Output Resistance                         | Rout                | f=1KHz                                 | --   | 16   | --   | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                                | --   | 450  | --   | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                                | --   | 2.2  | --   | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj          | Iout=10mA, 0°C≤Tj≤125°C                | --   | -0.8 | --   | mV/ °C |

## TSD7809E Electrical Characteristics

(Vin=15V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                         | Min  | Typ | Max  | Unit   |
|-------------------------------------------|---------------------|----------------------------------------|------|-----|------|--------|
| Output Voltage                            | Vout                | Tj=25°C                                | 8.65 | 9   | 9.36 | V      |
|                                           |                     | 11.5V≤Vin≤23V,<br>10mA≤Iout≤1A, PD≤15W | 8.57 | 9   | 9.45 |        |
| Line Regulation                           | REGline             | Tj=25°C                                | --   | 6   | 180  | mV     |
|                                           |                     | 11.5V≤Vin≤26V<br>12V≤Vin≤17V           | --   | 2   | 90   |        |
| Load Regulation                           | REGload             | Tj=25°C                                | --   | 12  | 180  |        |
|                                           |                     | 10mA≤Iout≤1A<br>250mA≤Iout≤750mA       | --   | 4   | 90   |        |
| Quiescent Current                         | Iq                  | Iout=0, Tj=25°C                        | --   | 4.3 | 8    | mA     |
| Quiescent Current Change                  | ΔIq                 | 11.5V≤Vin≤26V                          | --   | --  | 1    |        |
|                                           |                     | 10mA≤Iout≤1A                           | --   | --  | 0.5  |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                 | --   | 52  | --   | uV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 12V≤Vin≤22V                   | 55   | 72  | --   | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                     | --   | 2   | --   | V      |
| Output Resistance                         | Rout                | f=1KHz                                 | --   | 16  | --   | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                                | --   | 450 | --   | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                                | --   | 2.2 | --   | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj          | Iout=10mA, 0°C≤Tj≤125°C                | --   | -1  | --   | mV/ °C |

- Pulse testing techniques are used to maintain the junction temperature as close to the ambient temperature as possible, and thermal effects must be taken into account separately.
- This specification applies only for DC power dissipation permitted by absolute maximum ratings.

## TSD7810E Electrical Characteristics

Vin=16V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                         | Min              | Typ | Max  | Unit   |
|-------------------------------------------|---------------------|----------------------------------------|------------------|-----|------|--------|
| Output voltage                            | Vout                | Tj=25°C                                | 9.6              | 10  | 10.4 | V      |
|                                           |                     | 12.5V≤Vin≤25V,<br>10mA≤Iout≤1A, PD≤15W | 9.5              | 10  | 10.5 |        |
| Line Regulation                           | REGline             | Tj=25°C                                | 12.5V≤Vin≤28V    | --  | 7    | mV     |
|                                           |                     |                                        | 13V≤Vin≤17V      | --  | 2    |        |
| Load Regulation                           | REGload             | Tj=25°C                                | 10mA≤Iout≤1A     | --  | 12   |        |
|                                           |                     |                                        | 250mA≤Iout≤750mA | --  | 4    |        |
| Quiescent Current                         | Iq                  | Iout=0, Tj=25°C                        | --               | 4.3 | 8    | mA     |
| Quiescent Current Change                  | ΔIq                 | 12.5V≤Vin≤28V                          | --               | --  | 1    |        |
|                                           |                     | 10mA≤Iout≤1A                           | --               | --  | 0.5  |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                 | --               | 70  | --   | μV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 13V≤Vin≤23V                   | 55               | 71  | --   | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                     | --               | 2   | --   | V      |
| Output Resistance                         | Rout                | f=1KHz                                 | --               | 18  | --   | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                                | --               | 400 | --   | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                                | --               | 2.2 | --   | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj          | Iout=10mA, 0°C≤Tj≤125°C                | --               | -1  | --   | mV/ °C |

## TSD7812E Electrical Characteristics

(Vin=19V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol              | Test Condition                          | Min              | Typ | Max   | Unit   |
|-------------------------------------------|---------------------|-----------------------------------------|------------------|-----|-------|--------|
| Output Voltage                            | Vout                | Tj=25°C                                 | 11.53            | 12  | 12.48 | V      |
|                                           |                     | 14.5V≤Vin≤27V,<br>10mA≤Iout≤1A, PD ≤15W | 11.42            | 12  | 12.60 |        |
| Line Regulation                           | REGline             | Tj=25°C                                 | 14.5V≤Vin≤30V    | --  | 10    | mV     |
|                                           |                     |                                         | 15V≤Vin≤19V      | --  | 3     |        |
| Load Regulation                           | REGload             | Tj=25°C                                 | 10mA≤Iout≤1A     | --  | 12    |        |
|                                           |                     |                                         | 250mA≤Iout≤750mA | --  | 4     |        |
| Quiescent Current                         | Iq                  | Tj=25°C, Iout=0                         | --               | 4.3 | 8     | mA     |
| Quiescent Current Change                  | ΔIq                 | 14.5V≤Vin≤30V                           | --               | --  | 1     |        |
|                                           |                     | 10mA≤Iout≤1A                            | --               | --  | 0.5   |        |
| Output Noise Voltage                      | Vn                  | 10Hz≤f≤100KHz, Tj=25°C                  | --               | 75  | --    | uV     |
| Ripple Rejection Ratio                    | RR                  | f=120Hz, 15V≤Vin≤25V                    | 55               | 71  | --    | dB     |
| Voltage Drop                              | Vdrop               | Iout=1.0A, Tj=25°C                      | --               | 2   | --    | V      |
| Output Resistance                         | Rout                | f=1KHz                                  | --               | 18  | --    | mΩ     |
| Output Short Circuit Current              | Ios                 | Tj=25°C                                 | --               | 350 | --    | mA     |
| Peak Output Current                       | I <sub>o peak</sub> | Tj=25°C                                 | --               | 2.2 | --    | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj          | Iout=10mA, 0°C≤Tj≤125°C                 | --               | -1  | --    | mV/ °C |

- Pulse testing techniques are used to maintain the junction temperature as close to the ambient temperature as possible, and thermal effects must be taken into account separately.
- This specification applies only for DC power dissipation permitted by absolute maximum ratings.

## TSD7815E Electrical Characteristics

(Vin=23V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol     | Test Condition                          | Min              | Typ | Max   | Unit   |
|-------------------------------------------|------------|-----------------------------------------|------------------|-----|-------|--------|
| Output voltage                            | Vout       | Tj=25°C                                 | 14.42            | 15  | 15.60 | V      |
|                                           |            | 17.5V≤Vin≤30V,<br>10mA≤Iout≤1A, PD ≤15W | 14.28            | 15  | 15.75 |        |
| Line Regulation                           | REGline    | Tj=25°C                                 | 17.5V≤Vin≤30V    | --  | 12    | mV     |
|                                           |            |                                         | 18V≤Vin≤22V      | --  | 3     |        |
| Load Regulation                           | REGload    | Tj=25°C                                 | 10mA≤Iout≤1A     | --  | 12    |        |
|                                           |            |                                         | 250mA≤Iout≤750mA | --  | 4     |        |
| Quiescent Current                         | Iq         | Tj=25°C, Iout=0                         | --               | 4.3 | 8     | mA     |
| Quiescent Current Change                  | ΔIq        | 17.5V≤Vin≤30V                           | --               | --  | 1     |        |
|                                           |            | 10mA≤Iout≤1A                            | --               | --  | 0.5   |        |
| Output Noise Voltage                      | Vn         | 10Hz≤f≤100KHz, Tj=25°C                  | --               | 90  | --    | μV     |
| Ripple Rejection Ratio                    | RR         | f=120Hz, 18V≤Vin≤28V                    | 54               | 70  | --    | dB     |
| Voltage Drop                              | Vdrop      | Iout=1.0A, Tj=25°C                      | --               | 2   | --    | V      |
| Output Resistance                         | Rout       | f=1KHz                                  | --               | 19  | --    | mΩ     |
| Output Short Circuit Current              | Ios        | Tj=25°C                                 | --               | 230 | --    | mA     |
| Peak Output Current                       | Io peak    | Tj=25°C                                 | --               | 2.2 | --    | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj | Iout=10mA, 0°C≤Tj≤125°C                 | --               | -1  | --    | mV/ °C |

## TSD7818E Electrical Characteristics

(Vin=24V, Iout=500mA, 0°C≤Tj≤125°C, Cin=0.33uF, Cout=0.1uF; unless otherwise specified.)

| Parameter                                 | Symbol     | Test Condition                        | Min              | Typ | Max   | Unit   |
|-------------------------------------------|------------|---------------------------------------|------------------|-----|-------|--------|
| Output Voltage                            | Vout       | Tj=25°C                               | 17.30            | 18  | 18.72 | V      |
|                                           |            | 21V≤Vin≤33V, 10mA≤Iout≤1A,<br>PD ≤15W | 17.14            | 18  | 18.90 |        |
| Line Regulation                           | REGline    | Tj=25°C                               | 21V≤Vin≤33V      | --  | 15    | mV     |
|                                           |            |                                       | 22V≤Vin≤26V      | --  | 5     |        |
| Load Regulation                           | REGload    | Tj=25°C                               | 10mA≤Iout≤1A     | --  | 12    |        |
|                                           |            |                                       | 250mA≤Iout≤750mA | --  | 4     |        |
| Quiescent Current                         | Iq         | Tj=25°C, Iout=0                       | --               | 4.5 | 8     | mA     |
| Quiescent Current Change                  | ΔIq        | 21V≤Vin≤33V                           | --               | --  | 1     |        |
|                                           |            | 10mA≤Iout≤1A                          | --               | --  | 0.5   |        |
| Output Noise Voltage                      | Vn         | 10Hz≤f≤100KHz, Tj=25°C                | --               | 110 | --    | uV     |
| Ripple Rejection Ratio                    | RR         | f=120Hz, 21V≤Vin≤31V                  | 54               | 70  | --    | dB     |
| Voltage Drop                              | Vdrop      | Iout=1.0A, Tj=25°C                    | --               | 2   | --    | V      |
| Output Resistance                         | Rout       | f=1KHz                                | --               | 22  | --    | mΩ     |
| Output Short Circuit Current              | Ios        | Tj=25°C                               | --               | 200 | --    | mA     |
| Peak Output Current                       | Io peak    | Tj=25°C                               | --               | 2.2 | --    | A      |
| Temperature Coefficient of Output Voltage | ΔVout/ ΔTj | Iout=10mA, 0°C≤Tj≤125°C               | --               | -1  | --    | mV/ °C |

- Pulse testing techniques are used to maintain the junction temperature as close to the ambient temperature as possible, and thermal effects must be taken into account separately.
- This specification applies only for DC power dissipation permitted by absolute maximum ratings.

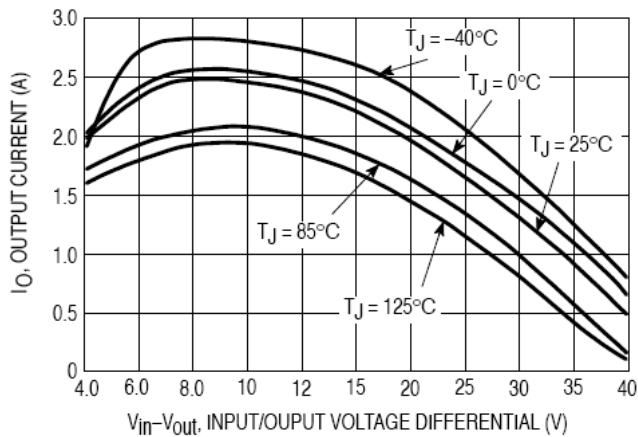
## TSD7824E Electrical Characteristics

$V_{in}=33V$ ,  $I_{out}=500mA$ ,  $0^{\circ}C \leq T_j \leq 125^{\circ}C$ ,  $C_{in}=0.33\mu F$ ,  $C_{out}=0.1\mu F$ ; unless otherwise specified.)

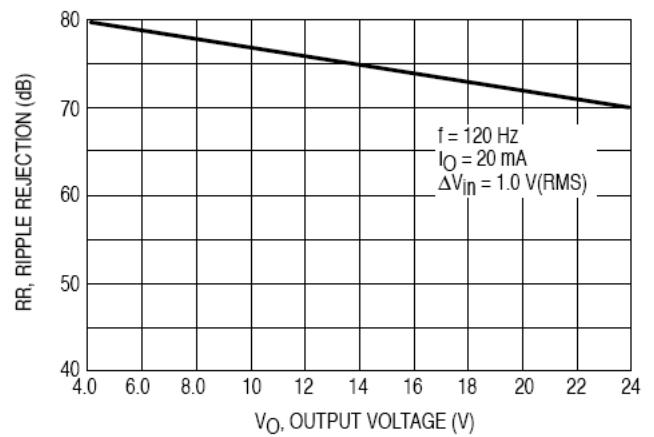
| Parameter                                 | Symbol                        | Test Condition                                                           | Min   | Typ  | Max   | Unit             |
|-------------------------------------------|-------------------------------|--------------------------------------------------------------------------|-------|------|-------|------------------|
| Output voltage                            | $V_{out}$                     | $T_j=25^{\circ}C$                                                        | 23.07 | 24   | 24.96 | V                |
|                                           |                               | $27V \leq V_{in} \leq 38V$ , $10mA \leq I_{out} \leq 1A$ , $PD \leq 15W$ | 22.85 | 24   | 25.20 |                  |
| Line Regulation                           | REGline                       | $T_j=25^{\circ}C$                                                        |       |      |       | mV               |
|                                           |                               | $27V \leq V_{in} \leq 38V$                                               | --    | 18   | 480   |                  |
|                                           |                               | $28V \leq V_{in} \leq 32V$                                               | --    | 6    | 240   |                  |
| Load Regulation                           | REGload                       | $T_j=25^{\circ}C$                                                        |       |      |       |                  |
|                                           |                               | $10mA \leq I_{out} \leq 1A$                                              | --    | 12   | 480   |                  |
|                                           |                               | $250mA \leq I_{out} \leq 750mA$                                          | --    | 4    | 240   |                  |
| Quiescent Current                         | $I_q$                         | $I_{out}=0$ , $T_j=25^{\circ}C$                                          | --    | 4.6  | 8     | mA               |
| Quiescent Current Change                  | $\Delta I_q$                  | $27V \leq V_{in} \leq 38V$                                               | --    | --   | 1     |                  |
|                                           |                               | $10mA \leq I_{out} \leq 1A$                                              | --    | --   | 0.5   |                  |
| Output Noise Voltage                      | $V_n$                         | $10Hz \leq f \leq 100KHz$ , $T_j=25^{\circ}C$                            | --    | 170  | --    | $\mu V$          |
| Ripple Rejection Ratio                    | RR                            | $f=120Hz$ , $27V \leq V_{in} \leq 37V$                                   | 54    | 70   | --    | dB               |
| Voltage Drop                              | $V_{drop}$                    | $I_{out}=1.0A$ , $T_j=25^{\circ}C$                                       | --    | 2    | --    | V                |
| Output Resistance                         | $R_{out}$                     | $f=1KHz$                                                                 | --    | 28   | --    | $m\Omega$        |
| Output Short Circuit Current              | $I_{os}$                      | $T_j=25^{\circ}C$                                                        | --    | 150  | --    | mA               |
| Peak Output Current                       | $I_{o peak}$                  | $T_j=25^{\circ}C$                                                        | --    | 2.2  | --    | A                |
| Temperature Coefficient of Output Voltage | $\Delta V_{out} / \Delta T_j$ | $I_{out}=10mA$ , $0^{\circ}C \leq T_j \leq 125^{\circ}C$                 | --    | -1.5 | --    | $mV / ^{\circ}C$ |

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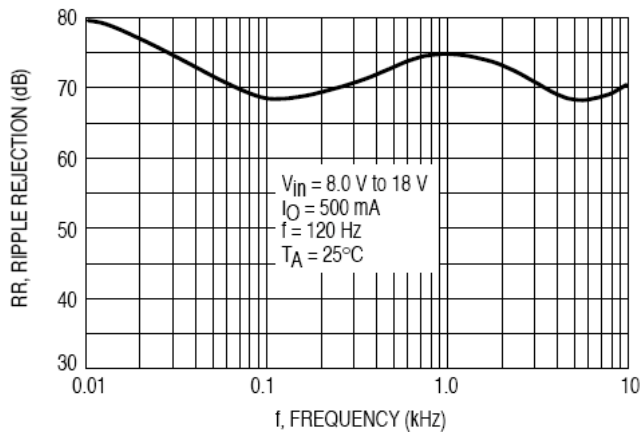
## Electrical Characteristics Curve



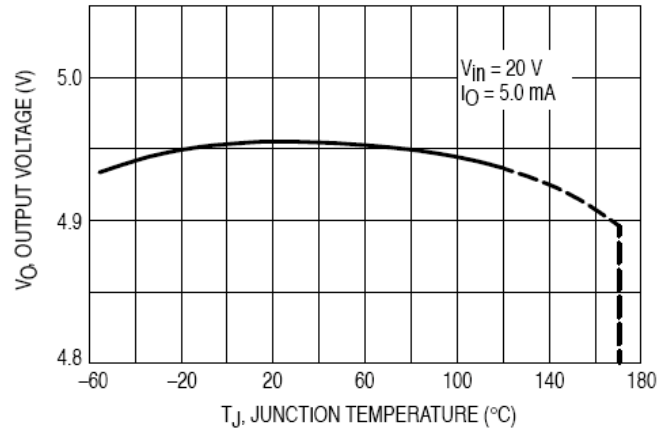
**Figure 1. Peak Output Current as a Function of Input-Output Differential Voltage**



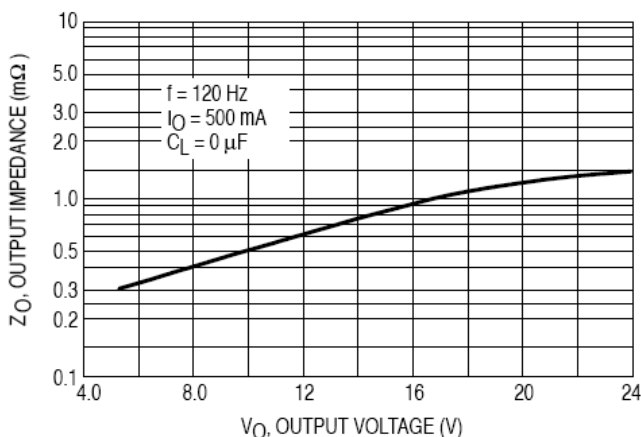
**Figure 2. Ripple Rejection as a Function of Output Voltage**



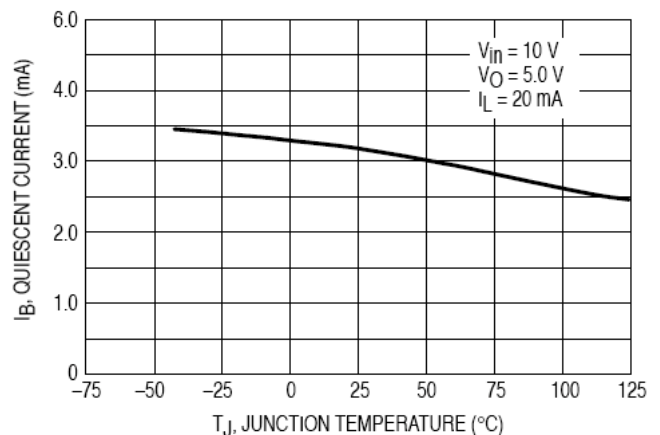
**Figure 3. Ripple Rejection as a Function of Frequency**



**Figure 4. Output Voltage as a Function of Junction Temperature**



**Figure 5. Output Impedance as a Function of Output Voltage**



**Figure 6. Quiescent Current as a Function of Temperature**