

## / Descriptions

TO-220F

### Voltage Regulator in a TO-220F Plastic Package.

## / Features

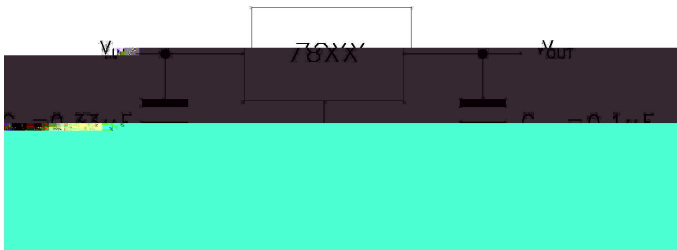
1.5A,

3-Terminal regulators ,output current up to 1.5A, internal thermal overload protection and short-circuit limiting.

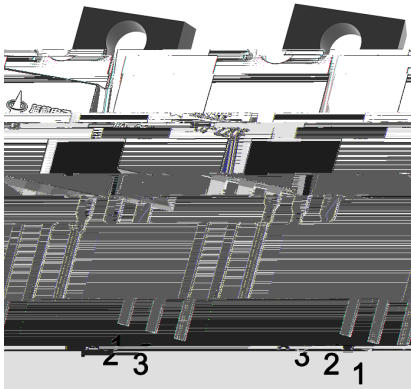
## / Applications

### Voltage Regulator.

### Equivalent Circuit or Application Circuit



## / Pinning



PIN1 IN

PIN 2 GND

PIN 3 OUT

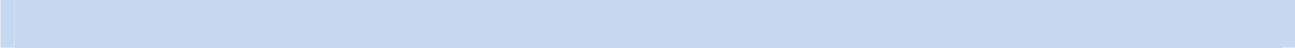
## / Marking

See Marking Instructions.

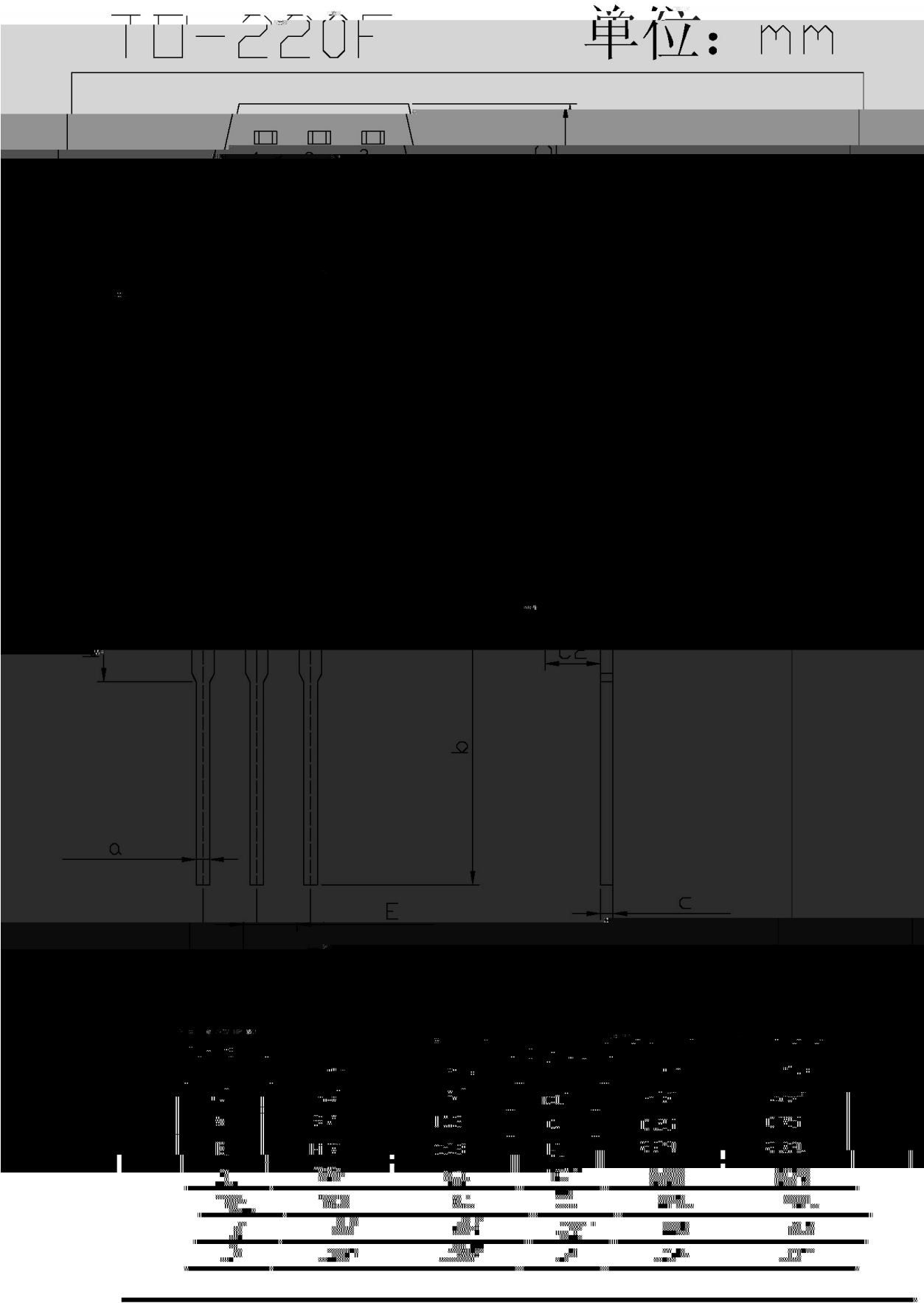


| Parameter                           | Symbol    | Rating  | Unit |
|-------------------------------------|-----------|---------|------|
| Input voltage                       | $V_i$     | 35      | V    |
| Thermal Resistance Junction-ambient | $R_{JA}$  | 60      | /W   |
| Thermal Resistance Junction-case    | $R_{JC}$  | 5.0     | /W   |
| Operating Temperature Range         | $T_{OPR}$ | -40 125 |      |
| Storage temperature range           | $T_{stg}$ | -65 150 |      |

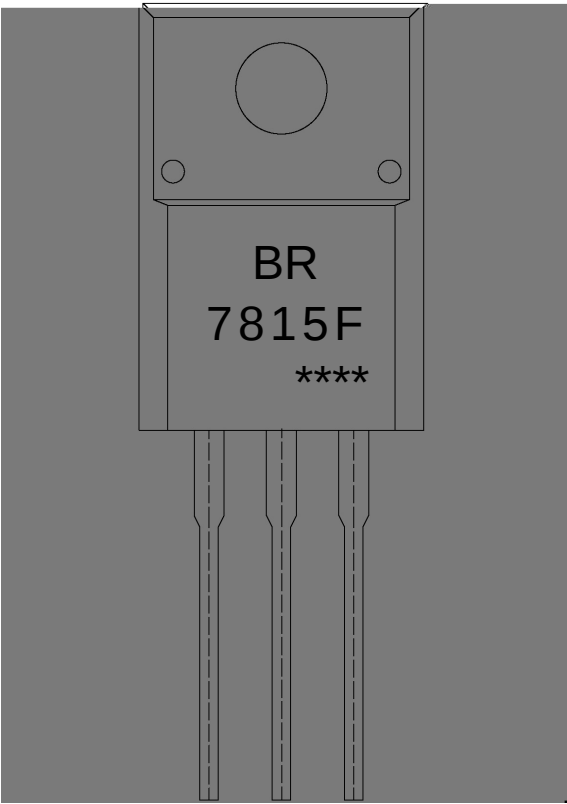
| Parameter                | Symbol   | Test Conditions                                   | Min   | Typ  | Max   | Unit     |
|--------------------------|----------|---------------------------------------------------|-------|------|-------|----------|
| Output voltage           | $V_o$    | $T_j=25$                                          | 14.4  | 15   | 15.6  | V        |
|                          |          | $V_i=17.5V-30V$<br>$I_o=5.0mA-1.0A$<br>$PD \ 15W$ | 14.25 | 15   | 15.75 | V        |
| Load Regulation          | $V_o$    | $T_j=25$<br>$I_o=5.0mA-1.5A$                      |       |      | 300   | mV       |
|                          |          | $T_j=25$<br>$I_o=250mA-750mA$                     |       |      | 150   | mV       |
| Line regulation          | $V_o$    | $T_j=25 \quad V_i=17.5V-30V$                      |       |      | 300   | mV       |
|                          |          | $T_j=25 \quad V_i=20V-26V$                        |       |      | 150   | mV       |
| Quiescent Current        | $I_q$    | $T_j=25$                                          |       |      | 8.0   | mA       |
| Quiescent Current Change | $I_q$    | $V_i=17.5V-30V$                                   |       |      | 1.0   | mA       |
|                          |          | $I_o=5.0mA-1.0A$                                  |       |      | 0.5   | mA       |
| Output Voltage Drift     | $V_o/ T$ | $I_o=5.0mA$                                       |       | -1.0 |       | mV/      |
| Output Noise Voltage     | eN       | B=10Hz-100KHz<br>$T_j=25$                         |       | 90   |       | V/ $V_o$ |
| Supply Voltage Rejection | SVR      | $V_i=18.5V-28.5V$<br>$f=120Hz$                    | 54    |      |       | dB       |
| Dropout Voltage          | $V_d$    | $I_o=1A \quad T_j=25$                             |       | 2.0  |       | V        |
| Output Resistance        | $R_o$    | $f=1.0KHz$                                        |       | 19   |       | m Max O  |



/ Package Dimensions



/ Marking Instructions



EU  
: ; 48I  
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Note:  
BR:           Company Code  
7815F:       Product Type  
\*\*\*\*:       Lot No. Code, code change with Lot No

