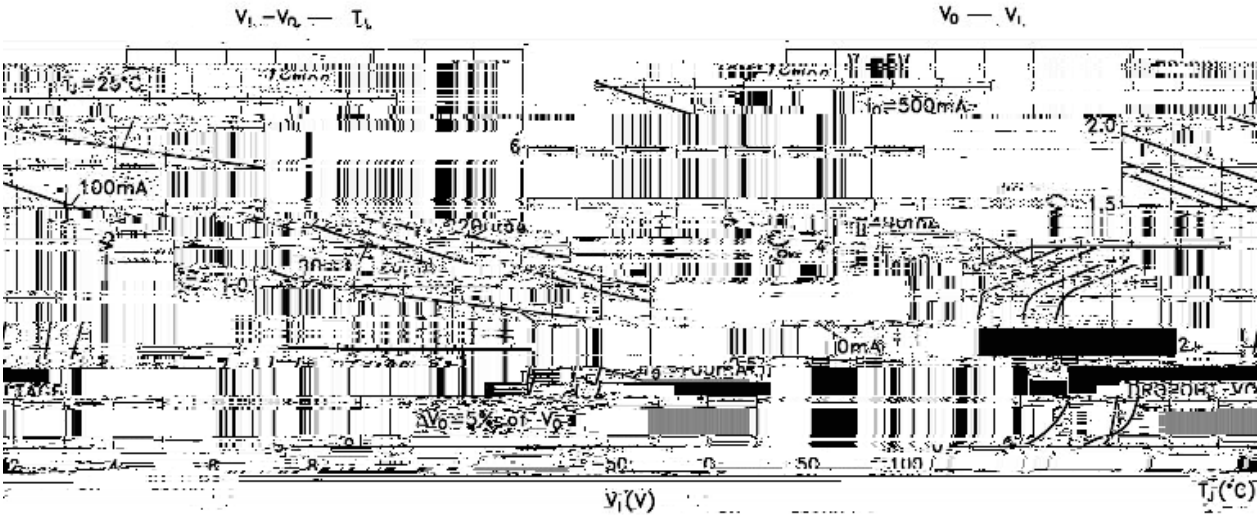
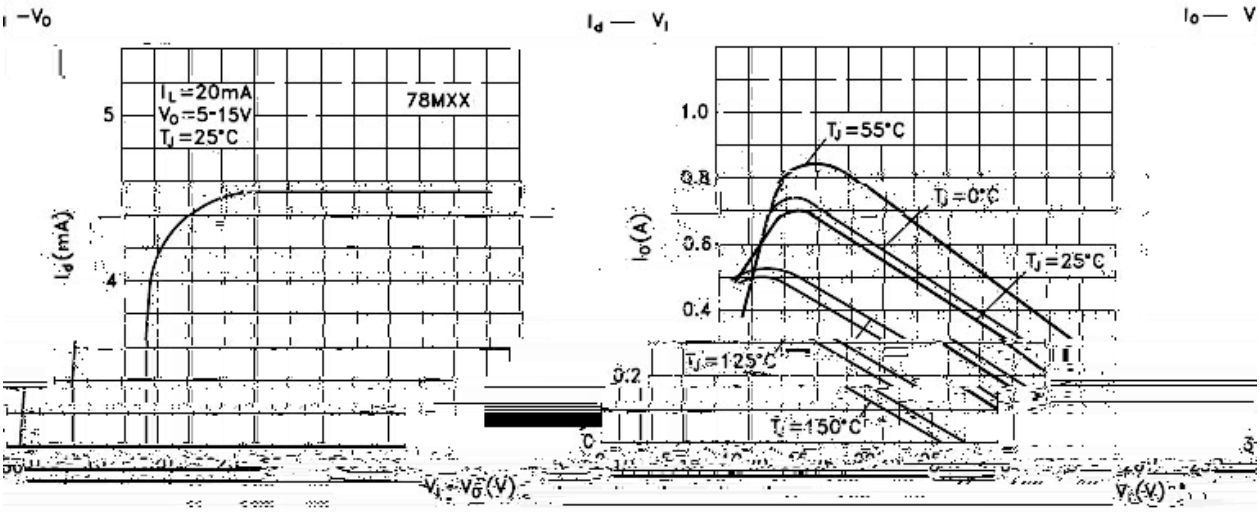
TO-252 ṂṂ Ŀ ɔ я ɔ̃ Ǫ ʜ Voltage Regulator in a TO-252 Plastic Package.

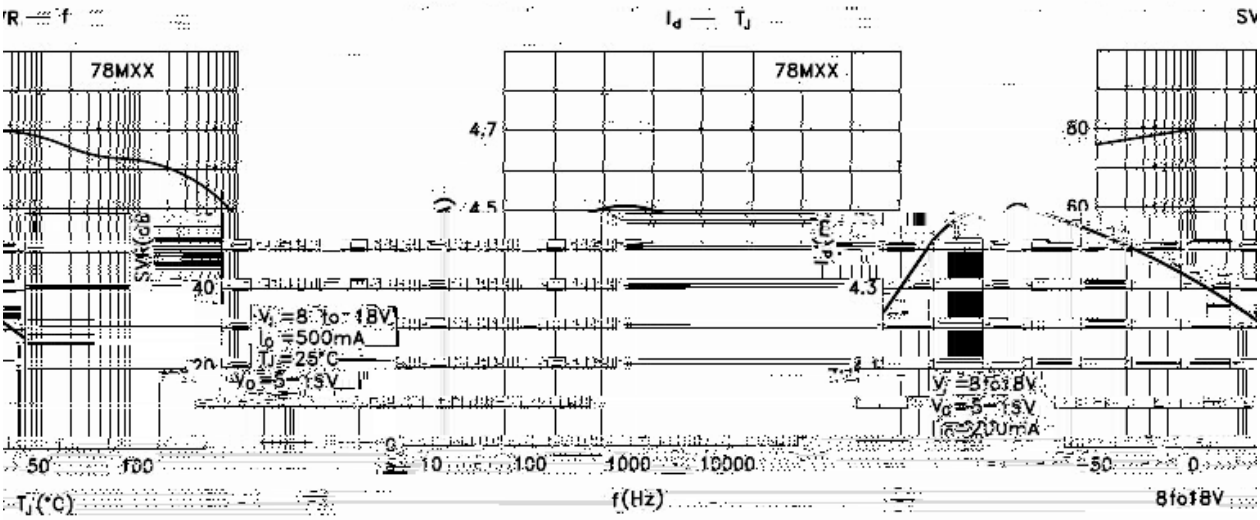
| v ̈Ω̣<br>Parameter | ɬ N<br>Symbol | ̈Ω̣Ö<br>Rating | D Ḫ<br>Unit |
|---|---|---|---|
| Input voltage | $V_I$ | 35 | V |
| Thernal Resistance Junction-ambient | $R_{JA}$ | 100 | Ṇ/W |
| Thernal Resistance Junction-case | $R_{JC}$ | 8.0 | Ṇ/W |
| Operating Junction Temperature Range | $T_{OPR}$ | 0˙ 125 | Ṇ |
| Storage temperature range | $T_{stg}$ | -65˙ 150 | Ṇ |

| v ̈Ω̣<br>Parameter | ɬ N<br>Symbol | ⊥⊥ ;ɬ Ţ<br>Test Conditions | ω̣ ṇ Ö<br>Min | Ɛ ʒ Ö<br>Typ | ω̣ ʑ Ö<br>Max | D Ḫ<br>Unit |
|---|---|---|---|---|---|---|
| Output voltage | $V_O$ | $T_j$=25 | 7.8 | 8 | 8.2 | V |
| | | $V_i$=10.5V-25V<br>Io=5mA-350mA | 7.7 | 8 | 8.3 | V |
| Load Regulation | ₦Vo | $T_j$=25<br>Io=5mA-500mA | | | 100 | mV |
| | | $T_j$=25<br>Io=5mA-200mA | | | 50 | mV |
| Line regulation | ₦Vo | $T_j$=25<br>$V_i$=10.5V-25V | | | 100 | mV |
| | | $T_j$=25<br>$V_i$=11V-25V | | | 50 | mV |
| Output Noise Voltage | eN | $T_j$=25Ṇ<br>B=10Hz-100KHz | | 52 | | V |
| Supply Voltage Rejection | SVR | f=120Hz<br>$V_i$=11.5V-21.5V | 56 | | | dB |
| Short Circuit Current | Isc | $V_i$=35V $T_j$=25Ṇ | | 250 | | mA |
| Quiescent Current | Id | $T_j$=25Ṇ | | | 6 | mA |
| Quiescent Current Change | ₦Id | $V_i$=8V-25V | | | 0.8 | mA |
| | | Io=5mA-350mA | | | 0.5 | mA |
| Output Voltage Drift | ₦Vo/₦T | Io=5mA | | 0.5 | | mV/Ṇ |

## / Electrical Characteristic Curve



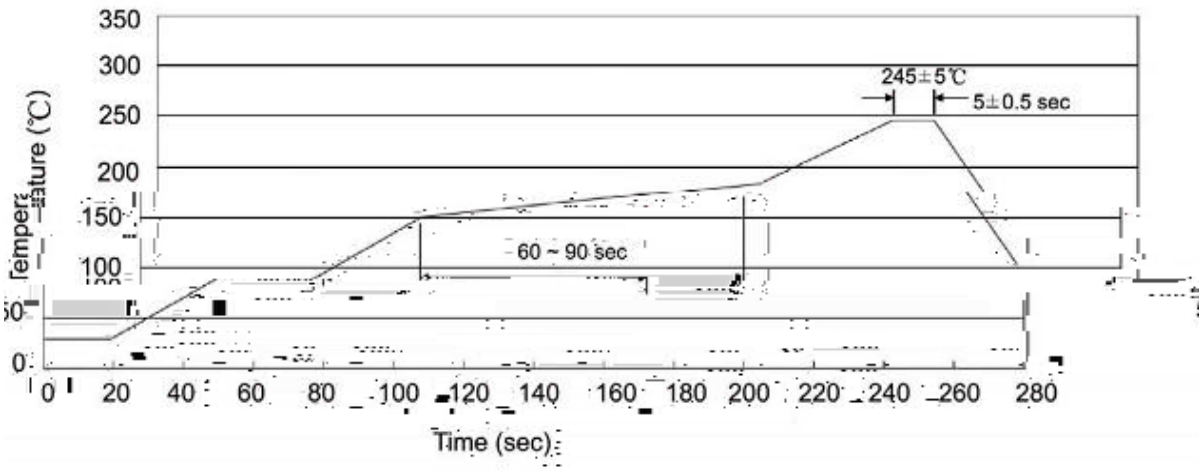
## / Package Dimensions




| | | | |
|---|---|---|---|
| 0.00 | 0.10 | | |
| D1 | 5.10 | 5.50 | K |

TO-252

## ( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)




ب ˝ χ

1 ǂ ♬ □ ỷ 150 Ḱ 180 ɬ ı `H ڑ 60 Ḱ 90sec;

2 Š Ö □ ỷ 245 ° 5 ɬ ı `H ڑ ˋY ⁄ı ⋇ 5 ° 0.5sec;

3 ì ˙ ˥ ˛ ɔ ھ ỷ ⋇ 2 Ḱ 10 ɬ /sec.

Note:

1.Preheating:150~180 ɬ , Time:60~90sec.

2.Peak Temp.:245 ° 5 ɬ , Duration:5 ° 0.5sec.

3. Cooling Speed: 2~10 ɬ /sec.

## / Resistance to Soldering Heat Test Conditions

□ ỷ χ 260 ° 5 ɬ `H ڑ χ 10 ° 1 sec. Temp:260±5 Time:10±1 sec

## / Packaging SPEC.

ɔ` γ ᴇ / REEL

| Package Type | Units | | | | | Dimension | | (unit mm$^3$) |
|---|---|---|---|---|---|---|---|---|
| | | | | | | | | |
| | | | | | | ρ | | |

˘ ˥ γ ᴇ / TUBE

| Package Type | Units | Dimension | (unit mm3) |
|---|---|---|---|