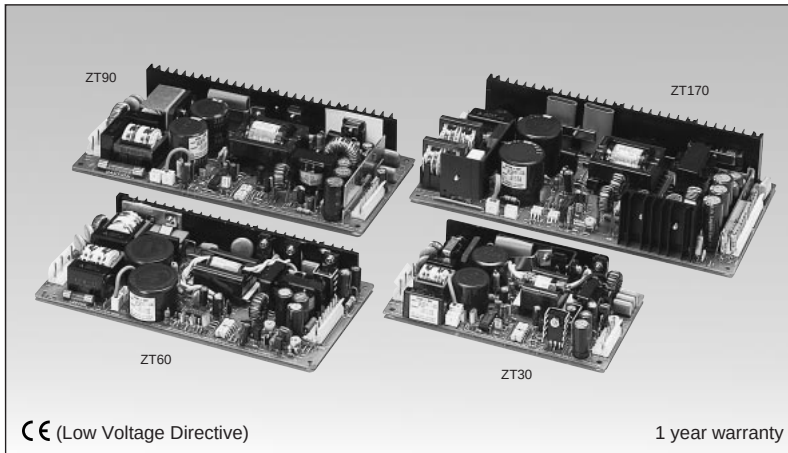


# ZT-SERIES

Triple output 30W ~ 170W



CE (Low Voltage Directive)

1 year warranty

## Model name

# ZT 30-522

Name of series Output power: 4 types in 30W ~ 170W

Output voltage code

522: 5V, +12V, -12V  
5FF: 5V, +15V, -15V  
525: 5V, +12V, -5V

## Features

- CE marking (Low Voltage Directive)
- Triple output  
12 models, 30W, 60W, 90W, 170W
- Wide input voltage range:  
100/200VAC user selectable
- Isolation between CH1 (5V) and  $\pm$ CH
- Compact, low profile and board type
- 1 year warranty

## Specifications

|                                                      |                                                                                                                                                                                                                                                                                                     |
|------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Input voltage range                               | 85 ~ 132VAC /170 ~ 265VAC (47 ~ 63Hz), 230 ~ 330VDC user selectable                                                                                                                                                                                                                                 |
| 2. Output voltage range                              | CH1: +5V (5.0 ~ 5.25V), CH2: Fixed, CH3: Fixed                                                                                                                                                                                                                                                      |
| 3. Cooling                                           | Convection cooling                                                                                                                                                                                                                                                                                  |
| 4. Operating ambient temperature (Standard mounting) | -10 ~ +60°C<br>ZT30, 60, 90 Output derating -10 ~ +50°C: 100%, +60°C: 70%<br>ZT170: Forced air cooling -10 ~ +50°C: 100%, +60°C: 70% (0.7m/S)<br>ZT170: Convection cooling<br>CH1 ... -10 ~ +25°C: 15A, +30°C: 13A, +40°C: 12A, +50°C: 10A, +60°C: 8A<br>CH2, CH3 ... -10 ~ +50°C: 100%, +60°C: 70% |
| 5. Withstand voltage                                 | Input-output: 3.75kVAC, Input-chassis: 2.5kVAC one minute each                                                                                                                                                                                                                                      |
| 6. Safety standard                                   | Approved by UL1950  , CSA950  and EN60950  |
| 7. EMI                                               | Conforms to VCCI-class B, FCC class B and VDE class B                                                                                                                                                                                                                                               |
| 8. Functions                                         | Over voltage protection (CH1), Over current protection                                                                                                                                                                                                                                              |

## Product lineup

|            |          | Note 1                 |                     |                     |                   |                         |       |     |    |   |  |
|------------|----------|------------------------|---------------------|---------------------|-------------------|-------------------------|-------|-----|----|---|--|
| Model name | CH       | Nominal output voltage | Min. output current | Max. output current | Max. output power | Total max. output power | UL    | CSA | EN |   |  |
| ZT30       | ZT30-522 | CH1                    | 5V                  | 0.3A                | 3.0A              | 15.0W                   | 33.0W | ○   | ○  | ○ |  |
|            |          | CH2                    | +12V                | 0A                  | 1.2A (2.0A)       | 14.4W                   | 33.0W | ○   | ○  | ○ |  |
|            |          | CH3                    | -12V                | 0A                  | 0.3A              | 3.6W                    | 33.0W | ○   | ○  | ○ |  |
|            | ZT30-5FF | CH1                    | 5V                  | 0.3A                | 3.0A              | 15.0W                   | 34.5W | ○   | ○  | ○ |  |
|            |          | CH2                    | +15V                | 0A                  | 1.0A (2.0A)       | 15.0W                   | 34.5W | ○   | ○  | ○ |  |
|            |          | CH3                    | -15V                | 0A                  | 0.3A              | 4.5W                    | 34.5W | ○   | ○  | ○ |  |
|            | ZT30-525 | CH1                    | 5V                  | 0.3A                | 3.0A              | 15.0W                   | 30.9W | ○   | ○  | ○ |  |
|            |          | CH2                    | +12V                | 0A                  | 1.2A (2.0A)       | 14.4W                   | 30.9W | ○   | ○  | ○ |  |
|            |          | CH3                    | -5V                 | 0A                  | 0.3A              | 1.5W                    | 30.9W | ○   | ○  | ○ |  |
| ZT60       | ZT60-522 | CH1                    | 5V                  | 0.5A                | 5.0A              | 25.0W                   | 61.0W | ○   | ○  | ○ |  |
|            |          | CH2                    | +12V                | 0A                  | 2.5A (3.5A)       | 30.0W                   | 61.0W | ○   | ○  | ○ |  |
|            |          | CH3                    | -12V                | 0A                  | 0.5A              | 6.0W                    | 61.0W | ○   | ○  | ○ |  |
|            | ZT60-5FF | CH1                    | 5V                  | 0.5A                | 5.0A              | 25.0W                   | 62.5W | ○   | ○  | ○ |  |
|            |          | CH2                    | +15V                | 0A                  | 2.0A (3.5A)       | 30.0W                   | 62.5W | ○   | ○  | ○ |  |
|            |          | CH3                    | -15V                | 0A                  | 0.5A              | 7.5W                    | 62.5W | ○   | ○  | ○ |  |
|            | ZT60-525 | CH1                    | 5V                  | 0.5A                | 5.0A              | 25.0W                   | 57.5W | ○   | ○  | ○ |  |
|            |          | CH2                    | +12V                | 0A                  | 2.5A (3.5A)       | 30.0W                   | 57.5W | ○   | ○  | ○ |  |
|            |          | CH3                    | -5V                 | 0A                  | 0.5A              | 2.5W                    | 57.5W | ○   | ○  | ○ |  |

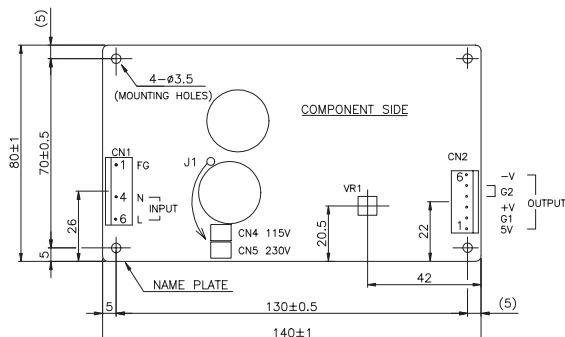
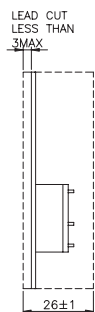
|            |           | Note 1                 |                     |                     |                   |                         |        |     |    |   |  |
|------------|-----------|------------------------|---------------------|---------------------|-------------------|-------------------------|--------|-----|----|---|--|
| Model name | CH        | Nominal output voltage | Min. output current | Max. output current | Max. output power | Total max. output power | UL     | CSA | EN |   |  |
| ZT90       | ZT90-522  | CH1                    | 5V                  | 1A                  | 10.0A             | 50.0W                   | 92.0W  | ○   | ○  | ○ |  |
|            |           | CH2                    | +12V                | 0A                  | 3.0A (4A)         | 36.0W                   | 92.0W  | ○   | ○  | ○ |  |
|            |           | CH3                    | -12V                | 0A                  | 0.5A              | 6.0W                    | 92.0W  | ○   | ○  | ○ |  |
|            | ZT90-5FF  | CH1                    | 5V                  | 1A                  | 10.0A             | 50.0W                   | 92.0W  | ○   | ○  | ○ |  |
|            |           | CH2                    | +15V                | 0A                  | 2.5A (4A)         | 37.5W                   | 95.0W  | ○   | ○  | ○ |  |
|            |           | CH3                    | -15V                | 0A                  | 0.5A              | 7.5W                    | 95.0W  | ○   | ○  | ○ |  |
|            | ZT90-525  | CH1                    | 5V                  | 1A                  | 10.0A             | 50.0W                   | 88.5W  | ○   | ○  | ○ |  |
|            |           | CH2                    | +12V                | 0A                  | 3.0A (4A)         | 36.0W                   | 88.5W  | ○   | ○  | ○ |  |
|            |           | CH3                    | -5V                 | 0A                  | 0.5A              | 2.5W                    | 88.5W  | ○   | ○  | ○ |  |
| ZT170      | ZT170-522 | CH1                    | 5V                  | 1A                  | 20.0A             | 100.0W                  | 172.0W | ○   | ○  | ○ |  |
|            |           | CH2                    | +12V                | 0A                  | 5.0A (6A)         | 60.0W                   | 172.0W | ○   | ○  | ○ |  |
|            |           | CH3                    | -12V                | 0A                  | 1.0A              | 12.0W                   | 172.0W | ○   | ○  | ○ |  |
|            | ZT170-5FF | CH1                    | 5V                  | 1A                  | 20.0A             | 100.0W                  | 175.0W | ○   | ○  | ○ |  |
|            |           | CH2                    | +15V                | 0A                  | 4.0A (6A)         | 60.0W                   | 175.0W | ○   | ○  | ○ |  |
|            |           | CH3                    | -15V                | 0A                  | 1.0A              | 15.0W                   | 175.0W | ○   | ○  | ○ |  |
|            | ZT170-525 | CH1                    | 5V                  | 1A                  | 20.0A             | 100.0W                  | 165.0W | ○   | ○  | ○ |  |
|            |           | CH2                    | +12V                | 0A                  | 5.0A (6A)         | 60.0W                   | 165.0W | ○   | ○  | ○ |  |
|            |           | CH3                    | -5V                 | 0A                  | 1.0A              | 5.0W                    | 165.0W | ○   | ○  | ○ |  |

Note 1: Duration of peak current shown in ( ): 5 seconds max.

- Request customer specification for further details of specifications, outline, characteristics, etc. Read the instruction manual before usage.
- Contact us about delivery before ordering.

○: Safety standard approved

## ZT30



### Recommended Noise Filter

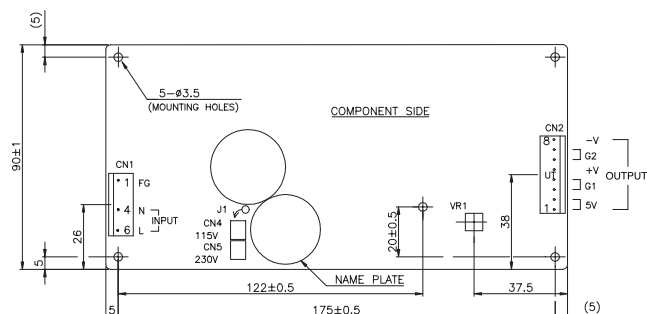
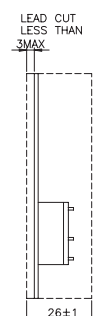
MAW-1202-22



GO!!  
P134

(Unit: mm)

## ZT60



### Recommended Noise Filter

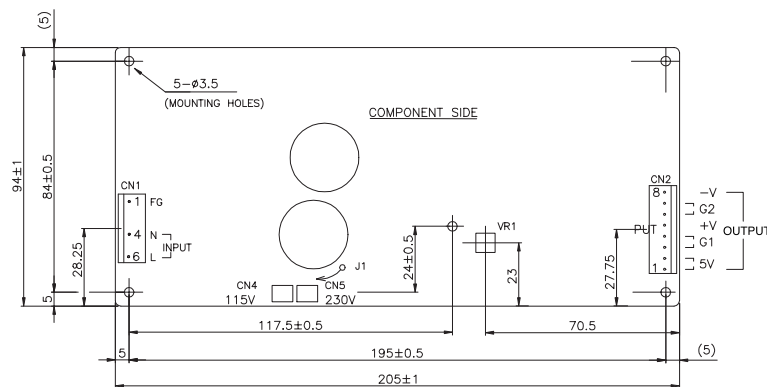
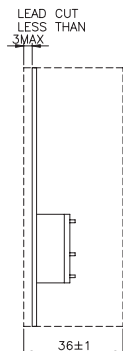
MAW-1203-22



GO!!  
P134

(Unit: mm)

## ZT90



### Recommended Noise Filter

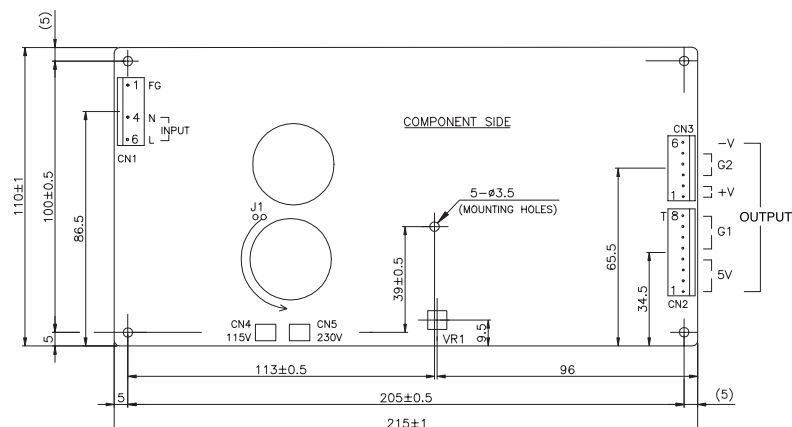
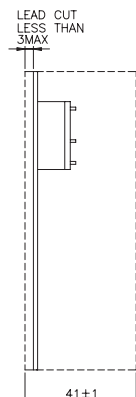
MB1206



GO!!  
P137

(Unit: mm)

## ZT170



### Recommended Noise Filter

MB1206



GO!!  
P137

(Unit: mm)