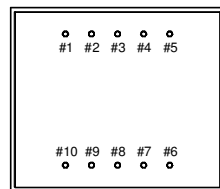




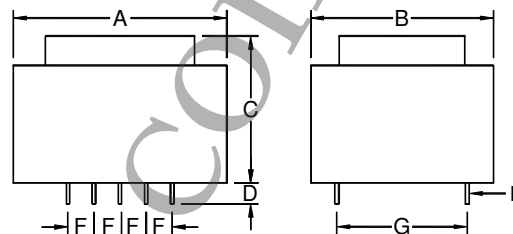
### Type EI38 / 16.5

- Power – 4.5/5.0VA
- Frequency – 50/60 Hz
- Temperature class – Class B (130°C)
- Ambient temperature (ta) – 70°C
- Dielectric strength – 4000Vrms
- Potted under vacuum
- Agency approvals
  - TUV / CE: EN61558 / EN60950
  - UL: UL506; UL5085-1 / -2
  - C-UL: CSA C22.2 #66 / #66.1 / #66.2

### Potting Shell



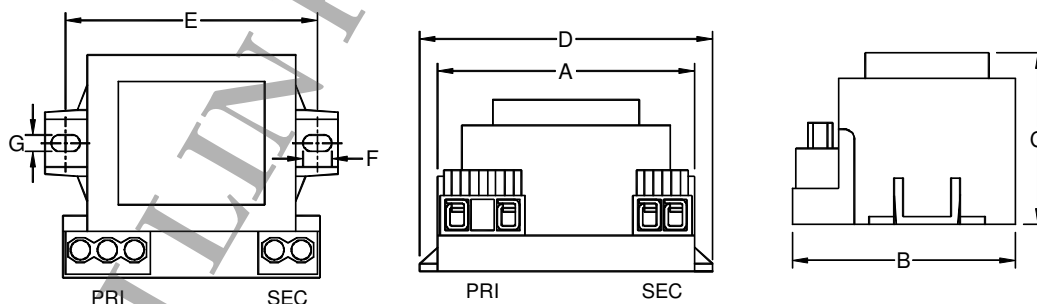
Bottom View



|                       | A    | B    | C    | D    | E      | F    | G    | Weight (g) |
|-----------------------|------|------|------|------|--------|------|------|------------|
| <b>Dimension (mm)</b> | 41.0 | 35.0 | 30.8 | 4.0  | SQ0.64 | 5.0  | 25.0 | 170        |
| <b>Tolerance (mm)</b> | ±0.5 | ±0.5 | ±0.5 | ±1.0 | ±0.1   | ±0.2 | ±0.5 | approx.    |

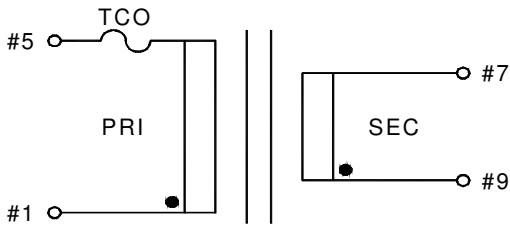
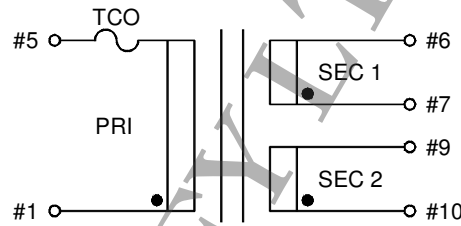
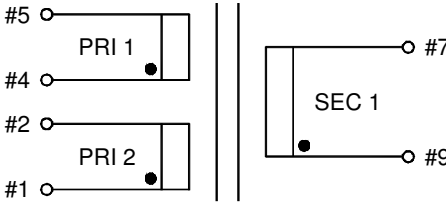
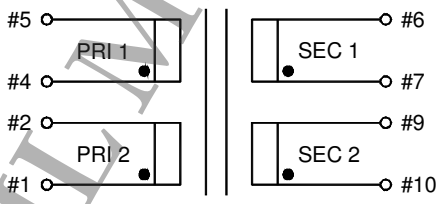
Note: 1) Unused pins are omitted for standard parts. Unused pins can be provided upon request.  
2) Suffix “(Z)” indicates the product with providing unused Pin #8.

### Style – Terminal Block



|                       | A    | B    | C    | D    | E    | F    | G    | Weight (g) |
|-----------------------|------|------|------|------|------|------|------|------------|
| <b>Dimension (mm)</b> | 50.0 | 43.4 | 36.1 | 57.0 | 49.0 | 5.6  | 3.2  | 190        |
| <b>Tolerance (mm)</b> | ±1.0 | ±1.0 | ±1.0 | ±1.0 | ±0.5 | ±0.5 | ±0.2 | approx.    |

## Schematics

|  |   |                                  |   |
|--|---|----------------------------------|---|
|  <p>TL38S / TL38US / TL38HS* Series</p> |  <p>TL38D / TL38UD / TL38HD* Series</p> |                                  |   |
|  <p>TL38MS Series</p>                   |  <p>TL38MD Series</p>                   |                                  |   |
| <p>Pins Connection<br/>(for dual windings items)</p>   | <p>Primary</p>  | <p>In Series<br/>In Parallel</p> | <p>Pin 1 – Pin 5 (Pins 2, 4 short)<br/>Pin 1 – Pin 5 (Pins 1, 4 short; Pins 2, 5 short)</p>   |
|  | <p>Secondary</p>  | <p>In Series<br/>In Parallel</p> | <p>Pin 7 – Pin 9 (Pins 6, 10 short)<br/>Pin 7 – Pin 9 (Pins 7, 10 short; Pins 6, 9 short)</p> |

\* The TCO is omitted for the TL38HS & TL38HD series.

## Part Number Designation

Two designations are available. Use TL38S-060-750 as example:

- 1) TL38S-060-750 = Potting Shell
- 2) TL38S-060-750TB = Terminal Block Style

Note:

- a) Terminal block style is only available for the single primary + single secondary items.
- b) Terminal block style is only available for “TUV / CE” approved items.
- c) In case of need, please add the appropriate suffixes in the part number when ordering.

# THAI LIN RADIO

since 1975

STANDARD  
ENCAPSULATED  
TRANSFORMER  
TYPE EI38 / 16.5

| Product Series | Primary (V)                    | Single Secondary |                  |                | Dual Secondary |                  |      | ta (°C) | Agency Approval         |
|----------------|--------------------------------|------------------|------------------|----------------|----------------|------------------|------|---------|-------------------------|
|                |                                | Part Number      | Secondary Rating |                | Part Number    | Secondary Rating |      |         |                         |
|                |                                |                  | (V)              | (mA)           |                | (V)              | (mA) |         |                         |
| 4.5VA          | 230                            | TL38S-060-750    | 6                | 750            | TL38D-060-375  | 2 x 6            | 375  | 70      | TUV CE                  |
|                |                                | TL38S-072-625    | 7.2              | 625            | TL38D-072-312  | 2 x 7.2          | 312  |         |                         |
|                |                                | TL38S-090-500    | 9                | 500            | TL38D-090-250  | 2 x 9            | 250  |         |                         |
|                |                                | TL38S-100-450    | 10               | 450            | TL38D-100-225  | 2 x 10           | 225  |         |                         |
|                |                                | TL38S-120-375    | 12               | 375            | TL38D-120-187  | 2 x 12           | 187  |         |                         |
|                |                                | TL38S-150-300    | 15               | 300            | TL38D-150-150  | 2 x 15           | 150  |         |                         |
|                |                                | TL38S-180-250    | 18               | 250            | TL38D-180-125  | 2 x 18           | 125  |         |                         |
|                |                                | TL38S-240-187    | 24               | 187            | TL38D-240-093  | 2 x 24           | 93   |         |                         |
|                | 115                            | TL38US-060-750   | 6                | 750            | TL38UD-060-375 | 2 x 6            | 375  | 70      | UL5085-1/-2 C-UL        |
|                |                                | TL38US-072-625   | 7.2              | 625            | TL38UD-072-312 | 2 x 7.2          | 312  |         |                         |
|                |                                | TL38US-090-500   | 9                | 500            | TL38UD-090-250 | 2 x 9            | 250  |         |                         |
|                |                                | TL38US-100-450   | 10               | 450            | TL38UD-100-225 | 2 x 10           | 225  |         |                         |
|                |                                | TL38US-120-375   | 12               | 375            | TL38UD-120-187 | 2 x 12           | 187  |         |                         |
|                |                                | TL38US-150-300   | 15               | 300            | TL38UD-150-150 | 2 x 15           | 150  |         |                         |
|                |                                | TL38US-180-250   | 18               | 250            | TL38UD-180-125 | 2 x 18           | 125  |         |                         |
|                |                                | TL38US-240-187   | 24               | 187            | TL38UD-240-093 | 2 x 24           | 93   |         |                         |
|                | 115 (Parallel) or 230 (Series) | TL38MS-060-750   | 6                | 750            | TL38MD-060-375 | 2 x 6            | 375  | 70      | UL5085-1/-2 C-UL TUV CE |
|                |                                | TL38MS-072-625   | 7.2              | 625            | TL38MD-072-312 | 2 x 7.2          | 312  |         |                         |
|                |                                | TL38MS-090-500   | 9                | 500            | TL38MD-090-250 | 2 x 9            | 250  |         |                         |
|                |                                | TL38MS-100-450   | 10               | 450            | TL38MD-100-225 | 2 x 10           | 225  |         |                         |
| TL38MS-120-375 |                                | 12               | 375              | TL38MD-120-187 | 2 x 12         | 187              |      |         |                         |
| TL38MS-150-300 |                                | 15               | 300              | TL38MD-150-150 | 2 x 15         | 150              |      |         |                         |
| TL38MS-180-250 |                                | 18               | 250              | TL38MD-180-125 | 2 x 18         | 125              |      |         |                         |
| TL38MS-240-187 |                                | 24               | 187              | TL38MD-240-093 | 2 x 24         | 93               |      |         |                         |
| 400            | TL38HS-060-750                 | 6                | 750              | TL38HD-060-375 | 2 x 6          | 375              | 70   | --      |                         |
|                | TL38HS-072-625                 | 7.2              | 625              | TL38HD-072-312 | 2 x 7.2        | 312              |      |         |                         |
|                | TL38HS-090-500                 | 9                | 500              | TL38HD-090-250 | 2 x 9          | 250              |      |         |                         |
|                | TL38HS-100-450                 | 10               | 450              | TL38HD-100-225 | 2 x 10         | 225              |      |         |                         |
|                | TL38HS-120-375                 | 12               | 375              | TL38HD-120-187 | 2 x 12         | 187              |      |         |                         |
|                | TL38HS-150-300                 | 15               | 300              | TL38HD-150-150 | 2 x 15         | 150              |      |         |                         |
|                | TL38HS-180-250                 | 18               | 250              | TL38HD-180-125 | 2 x 18         | 125              |      |         |                         |
|                | TL38HS-240-187                 | 24               | 187              | TL38HD-240-093 | 2 x 24         | 93               |      |         |                         |
| 5.0VA          | 230                            | TL38S-060-833    | 6                | 833            | TL38D-060-416  | 2 x 6            | 416  | 70      | TUV CE                  |
|                |                                | TL38S-072-694    | 7.2              | 694            | TL38D-072-347  | 2 x 7.2          | 347  |         |                         |
|                |                                | TL38S-090-555    | 9                | 555            | TL38D-090-277  | 2 x 9            | 277  |         |                         |
|                |                                | TL38S-100-500    | 10               | 500            | TL38D-100-250  | 2 x 10           | 250  |         |                         |
|                |                                | TL38S-120-416    | 12               | 416            | TL38D-120-208  | 2 x 12           | 208  |         |                         |
|                |                                | TL38S-150-333    | 15               | 333            | TL38D-150-166  | 2 x 15           | 166  |         |                         |
|                |                                | TL38S-180-277    | 18               | 277            | TL38D-180-138  | 2 x 18           | 138  |         |                         |
|                |                                | TL38S-240-208    | 24               | 208            | TL38D-240-104  | 2 x 24           | 104  |         |                         |
|                | 115                            | TL38US-060-833   | 6                | 833            | TL38UD-060-416 | 2 x 6            | 416  | 70      | UL5085-1/-2 C-UL        |
|                |                                | TL38US-072-694   | 7.2              | 694            | TL38UD-072-347 | 2 x 7.2          | 347  |         |                         |
|                |                                | TL38US-090-555   | 9                | 555            | TL38UD-090-277 | 2 x 9            | 277  |         |                         |
|                |                                | TL38US-100-500   | 10               | 500            | TL38UD-100-250 | 2 x 10           | 250  |         |                         |
|                |                                | TL38US-120-416   | 12               | 416            | TL38UD-120-208 | 2 x 12           | 208  |         |                         |
|                |                                | TL38US-150-333   | 15               | 333            | TL38UD-150-166 | 2 x 15           | 166  |         |                         |
|                |                                | TL38US-180-277   | 18               | 277            | TL38UD-180-138 | 2 x 18           | 138  |         |                         |
|                |                                | TL38US-240-208   | 24               | 208            | TL38UD-240-104 | 2 x 24           | 104  |         |                         |
|                | 115 (Parallel) or 230 (Series) | TL38MS-060-833   | 6                | 833            | TL38MD-060-416 | 2 x 6            | 416  | 70      | UL5085-1/-2 C-UL TUV CE |
|                |                                | TL38MS-072-694   | 7.2              | 694            | TL38MD-072-347 | 2 x 7.2          | 347  |         |                         |
|                |                                | TL38MS-090-555   | 9                | 555            | TL38MD-090-277 | 2 x 9            | 277  |         |                         |
|                |                                | TL38MS-100-500   | 10               | 500            | TL38MD-100-250 | 2 x 10           | 250  |         |                         |
| TL38MS-120-416 |                                | 12               | 416              | TL38MD-120-208 | 2 x 12         | 208              |      |         |                         |
| TL38MS-150-333 |                                | 15               | 333              | TL38MD-150-166 | 2 x 15         | 166              |      |         |                         |
| TL38MS-180-277 |                                | 18               | 277              | TL38MD-180-138 | 2 x 18         | 138              |      |         |                         |
| TL38MS-240-208 |                                | 24               | 208              | TL38MD-240-104 | 2 x 24         | 104              |      |         |                         |
| 400            | TL38HS-060-833                 | 6                | 833              | TL38HD-060-416 | 2 x 6          | 416              | 70   | --      |                         |
|                | TL38HS-072-694                 | 7.2              | 694              | TL38HD-072-347 | 2 x 7.2        | 347              |      |         |                         |
|                | TL38HS-090-555                 | 9                | 555              | TL38HD-090-277 | 2 x 9          | 277              |      |         |                         |
|                | TL38HS-100-500                 | 10               | 500              | TL38HD-100-250 | 2 x 10         | 250              |      |         |                         |
|                | TL38HS-120-416                 | 12               | 416              | TL38HD-120-208 | 2 x 12         | 208              |      |         |                         |
|                | TL38HS-150-333                 | 15               | 333              | TL38HD-150-166 | 2 x 15         | 166              |      |         |                         |
|                | TL38HS-180-277                 | 18               | 277              | TL38HD-180-138 | 2 x 18         | 138              |      |         |                         |
|                | TL38HS-240-208                 | 24               | 208              | TL38HD-240-104 | 2 x 24         | 104              |      |         |                         |

- Note: 1) TL38S & TL38D series are fail-safe transformers.  
2) TL38MS, TL38MD, TL38HS & TL38HD series are non-short-circuit proof transformers.