

Printed Circuit Mount

# IF Series

International Flathead™  
Low Profile Transformers

## For Critical Height and International Safety Requirements

Signal's IF transformers utilize unique insulating techniques including full encapsulation to meet international safety requirements. These transformers are ideal for low power applications where minimum height and reduced magnetic radiation are required.



### General Specifications

- Power - 2 VA to 30 VA
- Dielectric Strength - 4000 Vrms Hipot
- Dual Primaries - 115/230 V, 50/60 Hz
- Dual Secondaries - Series or parallel
- Height - 0.69" to 1.39" (17.5 mm to 35.3 mm) height
- Insulation System - Class B, 130° C

### Agency Certifications

- UL 1446 (E66312)
- UL recognized to UL 506 / UL 5085-2, File # E63829
- CSA certified to C22.2 #66.1, File # 221070
- VDE certified to VDE 0805 / EN 60950, File # 8325

## Part Number Selection

| Part Number | VA   | Secondary RMS Rating |               |
|-------------|------|----------------------|---------------|
|             | Size | Series               | Parallel      |
| IF-2-10     | 2    | 10 VCT @ 200 mA      | 5 V @ 400 mA  |
| IF-2-12     | 2    | 12 VCT @ 170 mA      | 6 V @ 340 mA  |
| IF-2-16     | 2    | 16 VCT @ 125 mA      | 8 V @ 250 mA  |
| IF-2-20     | 2    | 20 VCT @ 100 mA      | 10 V @ 200 mA |
| IF-2-24     | 2    | 24 VCT @ 85 mA       | 12 V @ 170 mA |
| IF-2-30     | 2    | 30 VCT @ 70 mA       | 15 V @ 140 mA |
| IF-2-34     | 2    | 34 VCT @ 60 mA       | 17 V @ 120 mA |
| IF-2-40     | 2    | 40 VCT @ 50 mA       | 20 V @ 100 mA |
| IF-2-56     | 2    | 56 VCT @ 40 mA       | 28 V @ 80 mA  |
| IF-2-230    | 2    | 230 VCT @ 9 mA       | 115 V @ 18 mA |
| IF-4-10     | 4    | 10 VCT @ 400 mA      | 5 V @ 800 mA  |
| IF-4-12     | 4    | 12 VCT @ 335 mA      | 6 V @ 670 mA  |
| IF-4-16     | 4    | 16 VCT @ 250 mA      | 8 V @ 500 mA  |
| IF-4-20     | 4    | 20 VCT @ 200 mA      | 10 V @ 400 mA |
| IF-4-24     | 4    | 24 VCT @ 170 mA      | 12 V @ 340 mA |
| IF-4-30     | 4    | 30 VCT @ 135 mA      | 15 V @ 270 mA |
| IF-4-34     | 4    | 34 VCT @ 120 mA      | 17 V @ 240 mA |
| IF-4-40     | 4    | 40 VCT @ 100 mA      | 20 V @ 200 mA |
| IF-4-56     | 4    | 56 VCT @ 70 mA       | 28 V @ 140 mA |
| IF-4-230    | 4    | 230 VCT @ 18 mA      | 115 V @ 36 mA |
| IF-6-10     | 6    | 10 VCT @ 600 mA      | 5 V @ 1.20 A  |
| IF-6-12     | 6    | 12 VCT @ 500 mA      | 6 V @ 1.00 A  |
| IF-6-16     | 6    | 16 VCT @ 375 mA      | 8 V @ 750 mA  |
| IF-6-20     | 6    | 20 VCT @ 300 mA      | 10 V @ 600 mA |
| IF-6-24     | 6    | 24 VCT @ 250 mA      | 12 V @ 500 mA |
| IF-6-30     | 6    | 30 VCT @ 200 mA      | 15 V @ 400 mA |
| IF-6-34     | 6    | 34 VCT @ 180 mA      | 17 V @ 360 mA |
| IF-6-40     | 6    | 40 VCT @ 150 mA      | 20 V @ 300 mA |
| IF-6-56     | 6    | 56 VCT @ 110 mA      | 28 V @ 220 mA |
| IF-6-230    | 6    | 230 VCT @ 25 mA      | 115 V @ 50 mA |

| Part Number | VA   | Secondary RMS Rating |                |
|-------------|------|----------------------|----------------|
|             | Size | Series               | Parallel       |
| IF-10-10    | 10   | 10 VCT @ 1.00 A      | 5 V @ 2.00 A   |
| IF-10-12    | 10   | 12 VCT @ 835 mA      | 6 V @ 1.67 A   |
| IF-10-16    | 10   | 16 VCT @ 625 mA      | 8 V @ 1.25 A   |
| IF-10-20    | 10   | 20 VCT @ 500 mA      | 10 V @ 1.00 A  |
| IF-10-24    | 10   | 24 VCT @ 420 mA      | 12 V @ 840 mA  |
| IF-10-30    | 10   | 30 VCT @ 335 mA      | 15 V @ 670 mA  |
| IF-10-34    | 10   | 34 VCT @ 300 mA      | 17 V @ 600 mA  |
| IF-10-40    | 10   | 40 VCT @ 250 mA      | 20 V @ 500 mA  |
| IF-10-56    | 10   | 56 VCT @ 180 mA      | 28 V @ 360 mA  |
| IF-10-230   | 10   | 230 VCT @ 45 mA      | 115 V @ 90 mA  |
| IF-14-10    | 14   | 10 VCT @ 1.40 A      | 5 V @ 2.80 A   |
| IF-14-12    | 14   | 12 VCT @ 1.20 A      | 6 V @ 2.40 A   |
| IF-14-16    | 14   | 16 VCT @ 875 mA      | 8 V @ 1.75 A   |
| IF-14-20    | 14   | 20 VCT @ 700 mA      | 10 V @ 1.40 A  |
| IF-14-24    | 14   | 24 VCT @ 600 mA      | 12 V @ 1.20 A  |
| IF-14-30    | 14   | 30 VCT @ 470 mA      | 15 V @ 940 mA  |
| IF-14-34    | 14   | 34 VCT @ 415 mA      | 17 V @ 830 mA  |
| IF-14-40    | 14   | 40 VCT @ 350 mA      | 20 V @ 700 mA  |
| IF-14-56    | 14   | 56 VCT @ 250 mA      | 28 V @ 500 mA  |
| IF-14-230   | 14   | 230 VCT @ 60 mA      | 115 V @ 120 mA |
| IF-18-10    | 18   | 10 VCT @ 1.80 A      | 5 V @ 3.6 A    |
| IF-18-12    | 18   | 12 VCT @ 1.50 A      | 6 V @ 3.00 A   |
| IF-18-16    | 18   | 16 VCT @ 1.15 A      | 8 V @ 2.30 A   |
| IF-18-20    | 18   | 20 VCT @ 900 mA      | 10 V @ 1.80 A  |
| IF-18-24    | 18   | 24 VCT @ 750 mA      | 12 V @ 1.50 A  |
| IF-18-30    | 18   | 30 VCT @ 600 mA      | 15 V @ 1.20 A  |
| IF-18-34    | 18   | 34 VCT @ 530 mA      | 17 V @ 1.06 A  |
| IF-18-40    | 18   | 40 VCT @ 450 mA      | 20 V @ 900 mA  |
| IF-18-56    | 18   | 56 VCT @ 320 mA      | 28 V @ 640 mA  |
| IF-18-230   | 18   | 230 VCT @ 80 mA      | 115 V @ 160 mA |

| Part Number | VA   | Secondary RMS Rating |                |
|-------------|------|----------------------|----------------|
|             | Size | Series               | Parallel       |
| IF-24-10    | 24   | 10 VCT @ 2.40 A      | 5 V @ 4.80 A   |
| IF-24-12    | 24   | 12 VCT @ 2.00 A      | 6 V @ 4.00 A   |
| IF-24-16    | 24   | 16 VCT @ 1.50 A      | 8 V @ 3.00 A   |
| IF-24-20    | 24   | 20 VCT @ 1.20 A      | 10 V @ 2.40 A  |
| IF-24-24    | 24   | 24 VCT @ 1.00 A      | 12 V @ 2.00 A  |
| IF-24-30    | 24   | 30 VCT @ 800 mA      | 15 V @ 1.60 A  |
| IF-24-34    | 24   | 34 VCT @ 700 mA      | 17 V @ 1.40 A  |
| IF-24-40    | 24   | 40 VCT @ 600 mA      | 20 V @ 1.20 A  |
| IF-24-56    | 24   | 56 VCT @ 430 mA      | 28 V @ 860 mA  |
| IF-24-230   | 24   | 230 VCT @ 105 mA     | 115 V @ 210 mA |
| IF-30-10    | 30   | 10 VCT @ 3.00 A      | 5 V @ 6.00 A   |
| IF-30-12    | 30   | 12 VCT @ 2.50 A      | 6 V @ 5.00 A   |
| IF-30-16    | 30   | 16 VCT @ 1.90 A      | 8 V @ 3.80 A   |
| IF-30-20    | 30   | 20 VCT @ 1.50 A      | 10 V @ 3.00 A  |
| IF-30-24    | 30   | 24 VCT @ 1.25 A      | 12 V @ 2.50 A  |
| IF-30-30    | 30   | 30 VCT @ 1.00 A      | 15 V @ 2.00 A  |
| IF-30-34    | 30   | 34 VCT @ 900 mA      | 17 V @ 1.80 A  |
| IF-30-40    | 30   | 40 VCT @ 750 mA      | 20 V @ 1.50 A  |
| IF-30-56    | 30   | 56 VCT @ 550 mA      | 28 V @ 1.10 A  |
| IF-30-230   | 30   | 230 VCT @ 130 mA     | 115 V @ 260 mA |



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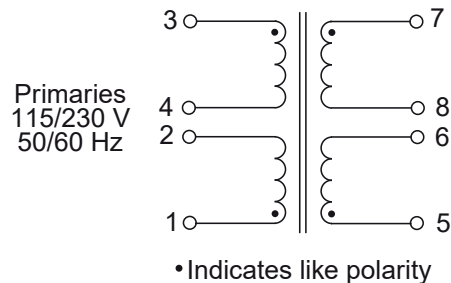
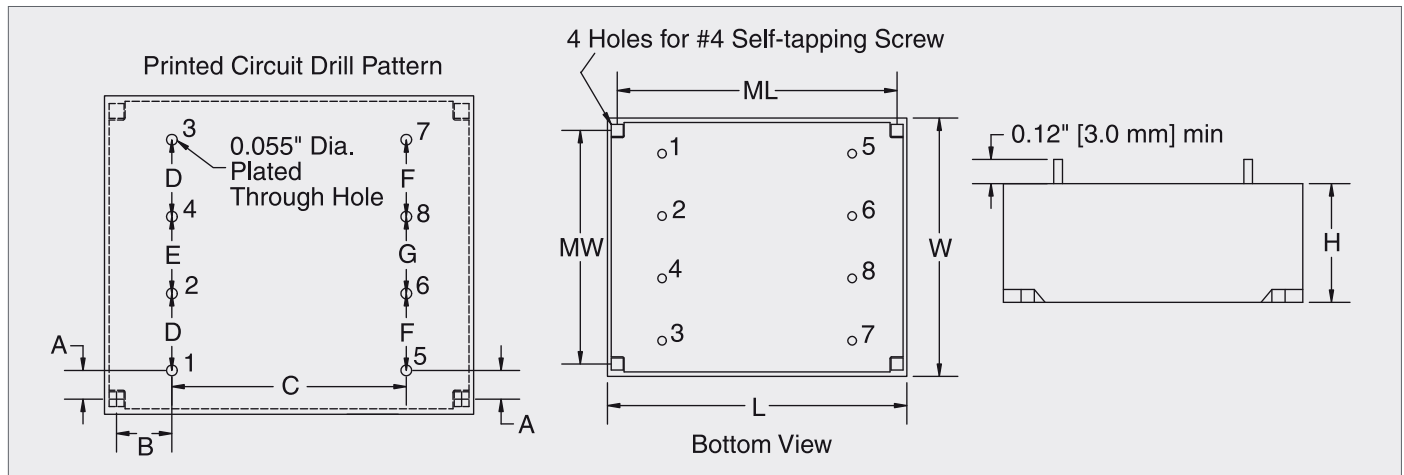


128 Atlantic Avenue, Lynbrook, NY 11563  
Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208  
sales@signaltransformer.com | techhelp@signaltransformer.com

[belfuse.com/signal](http://belfuse.com/signal)

## Mechanical Specifications

| VA   | L              | W              | H              | ML             | MW             | A             | B             | C              | D              | E              | F              | G              | Weight         |
|------|----------------|----------------|----------------|----------------|----------------|---------------|---------------|----------------|----------------|----------------|----------------|----------------|----------------|
| Size | Inches (mm)    |                |                |                |                |               |               |                |                |                |                |                | oz (kg)        |
| 2    | 2.09<br>(53.0) | 1.73<br>(44.0) | 0.69<br>(17.6) | 1.87<br>(47.5) | 1.48<br>(37.5) | 0.05<br>(1.3) | 0.25<br>(6.3) | 1.38<br>(35.0) | 0.39<br>(10.0) | 0.39<br>(10.0) | 0.59<br>(15.0) | 0.19<br>(5.0)  | 4.6<br>(0.13)  |
| 4    | 2.09<br>(53.0) | 1.73<br>(44.0) | 0.77<br>(19.6) | 1.87<br>(47.5) | 1.48<br>(37.5) | 0.05<br>(1.3) | 0.25<br>(6.3) | 1.38<br>(35.0) | 0.39<br>(10.0) | 0.39<br>(10.0) | 0.59<br>(15.0) | 0.19<br>(5.0)  | 5.4<br>(0.15)  |
| 6    | 2.09<br>(53.0) | 1.73<br>(44.0) | 0.89<br>(22.6) | 1.87<br>(47.5) | 1.48<br>(37.5) | 0.05<br>(1.3) | 0.25<br>(6.3) | 1.38<br>(35.0) | 0.39<br>(10.0) | 0.39<br>(10.0) | 0.59<br>(15.0) | 0.19<br>(5.0)  | 6.9<br>(0.20)  |
| 10   | 2.66<br>(67.6) | 2.24<br>(57.0) | 0.89<br>(22.6) | 2.46<br>(62.5) | 1.97<br>(50.0) | 0.28<br>(7.1) | 0.34<br>(8.8) | 1.77<br>(45.0) | 0.59<br>(15.0) | 0.43<br>(10.9) | 0.39<br>(10.0) | 0.63<br>(15.9) | 10.3<br>(0.29) |
| 14   | 2.66<br>(67.6) | 2.24<br>(57.0) | 0.96<br>(24.3) | 2.46<br>(62.5) | 1.97<br>(50.0) | 0.28<br>(7.1) | 0.34<br>(8.8) | 1.77<br>(45.0) | 0.59<br>(15.0) | 0.43<br>(10.9) | 0.39<br>(10.0) | 0.63<br>(15.9) | 11.9<br>(0.34) |
| 18   | 2.66<br>(67.6) | 2.24<br>(57.0) | 1.09<br>(27.6) | 2.46<br>(62.5) | 1.97<br>(50.0) | 0.28<br>(7.1) | 0.34<br>(8.8) | 1.77<br>(45.0) | 0.59<br>(15.0) | 0.43<br>(10.9) | 0.39<br>(10.0) | 0.63<br>(15.9) | 14.1<br>(0.40) |
| 24   | 2.68<br>(68.0) | 2.26<br>(57.5) | 1.23<br>(31.3) | 2.46<br>(62.5) | 1.97<br>(50.0) | 0.28<br>(7.1) | 0.34<br>(8.8) | 1.77<br>(45.0) | 0.59<br>(15.0) | 0.43<br>(10.9) | 0.39<br>(10.0) | 0.63<br>(15.9) | 16.5<br>(0.47) |
| 30   | 2.68<br>(68.0) | 2.26<br>(57.5) | 1.39<br>(35.3) | 2.46<br>(62.5) | 1.97<br>(50.0) | 0.28<br>(7.1) | 0.34<br>(8.8) | 1.77<br>(45.0) | 0.59<br>(15.0) | 0.43<br>(10.9) | 0.39<br>(10.0) | 0.63<br>(15.9) | 19.7<br>(0.58) |



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128 Atlantic Avenue, Lynbrook, NY 11563  
Toll Free 866-239-5777 | Tel 516-239-5777 | Fax 516-239-7208  
sales@signaltransformer.com | techhelp@signaltransformer.com

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