

The International On-Board Transformer

OB Range transformers are mounted in resin-filled, flat thermoplastic cases with pins for soldering directly to plated-through holes in P.C. boards.

For additional mounting strength, four holes are molded into the corners of the case to accept optional mounting screws.

The non-concentric twin primary and secondary windings are wound on separate bobbins, which provides maximum isolation and low inter-winding capacitance.

The low height profile allows for close spacing between boards.

Features and Benefits

- International certifications: UL 506, CSA C22.2, EN 60/742, EN 61 558, SEV 1003, VDE 0551, VDE 0570. CE marked.
- Also available in self-extinguishing materials to UL 94V-0.
- Low profile
- PCB mounted
- Resin filled under vacuum
- 5KV AC flash test
- Custom designs available
- Industry standard
- High reliability

General Specification for OB types

Primaries: 115/230 V.

Frequency: 50/60 Hz.

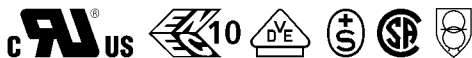
Maximum ambient temperature: 40° C.

Secondary voltage tolerance: Within 5% at normal input and full load.

Flash tested: at 5K VAC.

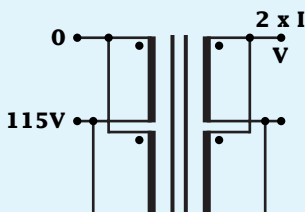
Mounting: On P.C. board.

Certifications: VDE 0551, VDE 0570, IEC 742, UL 506, DIN/EN60 742, EN61 558, CSA C22.2, SEV 1003; EN 60-950 available on request.

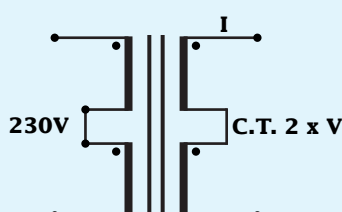


Transformer Connections

Primaries and Secondaries Parallel Connected



Primaries and Secondaries Series Connected



Primaries Series Connected, Secondaries Independent

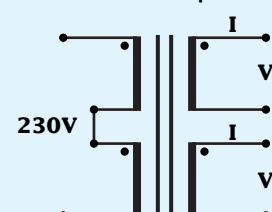


Figure 1

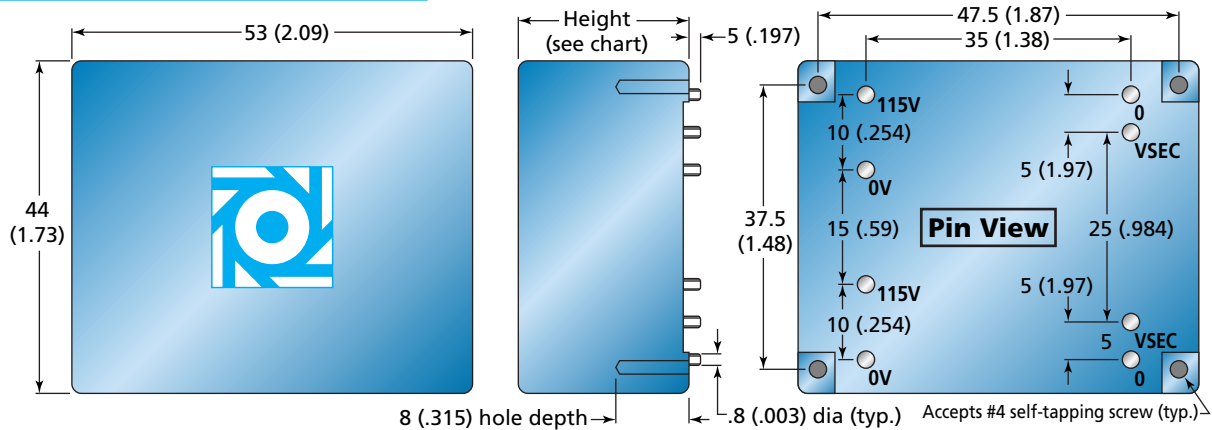
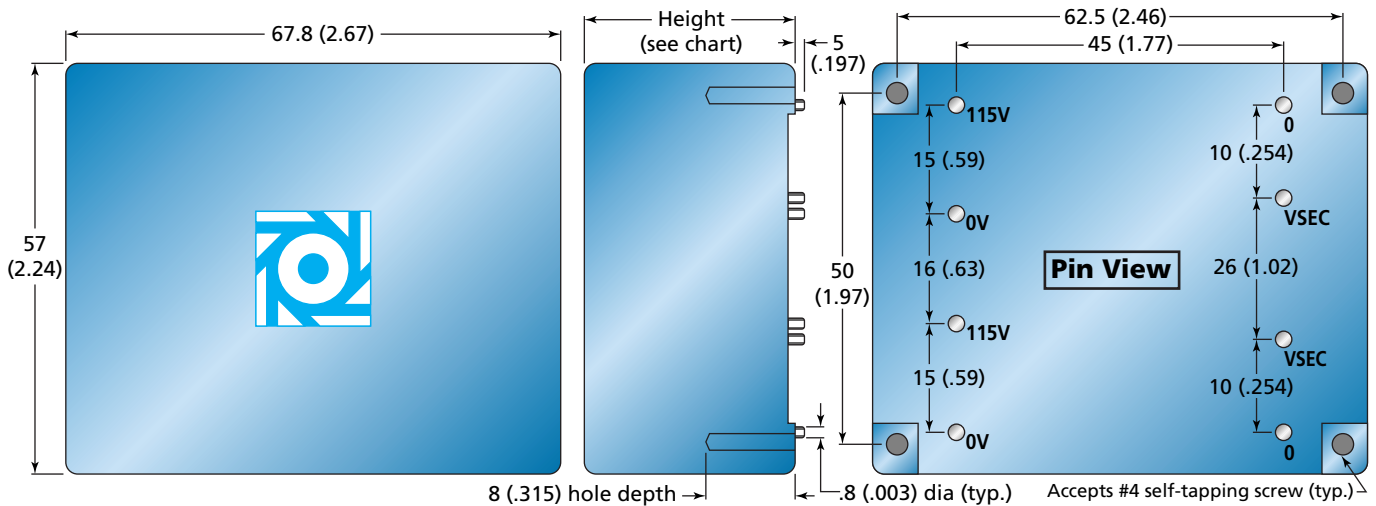


Figure 2



Dimensions in mm (inches). • Proportions altered to illustrate detail.

Transformer Specifications

Load (VA)	Secondary RMS Rating Series	Secondary RMS Rating Parallel	Regulation (Typical)	Height (mm / inches)	Weight (g / pounds)	Drawing Figure	AVEL P/N
0.8	10V @ 80mA	5V @ 160mA	30%	10.8 / .425	107 / 0.23	2	OB.8-5
0.8	12V @ 67mA	6V @ 133mA	30%	10.8 / .425	107 / 0.23	2	OB.8-6
0.8	18V @ 44mA	9V @ 88mA	30%	10.8 / .425	107 / 0.23	2	OB.8-9
0.8	24V @ 33mA	12V @ 66mA	30%	10.8 / .425	107 / 0.23	2	OB.8-12
0.8	30V @ 27mA	15V @ 54mA	30%	10.8 / .425	107 / 0.23	2	OB.8-15
0.8	36V @ 22mA	18V @ 44mA	30%	10.8 / .425	107 / 0.23	2	OB.8-18
0.8	48V @ 17mA	24V @ 33mA	30%	10.8 / .425	107 / 0.23	2	OB.8-24*
2	10V @ 200mA	5V @ 400mA	25%	17.6 / .692	115 / 0.254	1	OB2-5
2	12V @ 170mA	6V @ 340mA	25%	17.6 / .692	115 / 0.254	1	OB2-6
2	18V @ 110mA	9V @ 220mA	25%	17.6 / .692	115 / 0.254	1	OB2-9
2	24V @ 85mA	12V @ 170mA	25%	17.6 / .692	115 / 0.254	1	OB2-12
2	30V @ 70mA	15V @ 140mA	25%	17.6 / .692	115 / 0.254	1	OB2-15
2	36V @ 65mA	18V @ 110mA	25%	17.6 / .692	115 / 0.254	1	OB2-18
2	48V @ 40mA	24V @ 80mA	25%	17.6 / .692	115 / 0.254	1	OB2-24*

* These transformers meet VDE 0550 only.

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Transformer Specifications (continued)

Load (VA)	Secondary RMS Rating Series	Secondary RMS Rating Parallel	Regulation (Typical)	Height (mm / inches)	Weight (g / pounds)	Drawing Figure	AVEL P/N
4	10V @ 400mA	5V @ 800mA	22%	19.6 / .772	145 / 0.32	1	OB4-5
4	12V @ 330mA	6V @ 660mA	22%	19.6 / .772	145 / 0.32	1	OB4-6
4	18V @ 220mA	9V @ 440mA	22%	19.6 / .772	145 / 0.32	1	OB4-9
4	24V @ 165mA	12V @ 330mA	22%	19.6 / .772	145 / 0.32	1	OB4-12
4	30V @ 135mA	15V @ 270mA	22%	19.6 / .772	145 / 0.32	1	OB4-15
4	36V @ 110mA	18V @ 220mA	22%	19.6 / .772	145 / 0.32	1	OB4-18
4	48V @ 85mA	24V @ 170mA	22%	19.6 / .772	145 / 0.32	1	OB4-24*
6	10V @ 600mA	5V @ 1.2A	19%	22.6 / .889	175 / 0.386	1	OB6-5
6	12V @ 500mA	6V @ 1A	19%	22.6 / .889	175 / 0.386	1	OB6-6
6	18V @ 330mA	9V @ 660mA	19%	22.6 / .889	175 / 0.386	1	OB6-9
6	24V @ 250mA	12V @ 500mA	19%	22.6 / .889	175 / 0.386	1	OB6-12
6	30V @ 200mA	15V @ 400mA	19%	22.6 / .889	175 / 0.386	1	OB6-15
6	36V @ 165mA	18V @ 330mA	19%	22.6 / .889	175 / 0.386	1	OB6-18
6	48V @ 125mA	24V @ 250mA	19%	22.6 / .889	175 / 0.386	1	OB6-24*
10	10V @ 1A	5V @ 2A	26%	22.8 / .898	280 / 0.617	2	OB10-5
10	12V @ 830mA	6V @ 1.66A	26%	22.8 / .898	280 / 0.617	2	OB10-6
10	18V @ 550mA	9V @ 1.10A	26%	22.8 / .898	280 / 0.617	2	OB10-9
10	24V @ 420mA	12V @ 840mA	26%	22.8 / .898	280 / 0.617	2	OB10-12
10	30V @ 335mA	15V @ 670mA	26%	22.8 / .898	280 / 0.617	2	OB10-15
10	36V @ 280mA	18V @ 560mA	26%	22.8 / .898	280 / 0.617	2	OB10-18
10	48V @ 210mA	24V @ 420mA	26%	22.8 / .898	280 / 0.617	2	OB10-24*
14	10V @ 1.4A	5V @ 2.8A	18%	24.4 / .976	315 / 0.695	2	OB14-5
14	12V @ 1.15A	6V @ 2.3A	18%	24.4 / .976	315 / 0.695	2	OB14-6
14	18V @ 780mA	9V @ 1.56A	18%	24.4 / .976	315 / 0.695	2	OB14-9
14	24V @ 585mA	12V @ 1.17A	18%	24.4 / .976	315 / 0.695	2	OB14-12
14	30V @ 470mA	15V @ 940mA	18%	24.4 / .976	315 / 0.695	2	OB14-15
14	36V @ 390mA	18V @ 780mA	18%	24.4 / .976	315 / 0.695	2	OB14-18
14	48V @ 290mA	24V @ 580mA	18%	24.4 / .976	315 / 0.695	2	OB14-24*
18	10V @ 1.8A	5V @ 3.6A	17%	27.6 / 1.087	375 / 0.827	2	OB18-5
18	12V @ 1.5A	6V @ 3.0A	17%	27.6 / 1.087	375 / 0.827	2	OB18-6
18	18V @ 1.0A	9V @ 2.0A	17%	27.6 / 1.087	375 / 0.827	2	OB18-9
18	24V @ 750mA	12V @ 1.5A	17%	27.6 / 1.087	375 / 0.827	2	OB18-12
18	30V @ 600mA	15V @ 1.2A	17%	27.6 / 1.087	375 / 0.827	2	OB18-15
18	36V @ 500mA	18V @ 1.0A	17%	27.6 / 1.087	375 / 0.827	2	OB18-18
18	48V @ 375mA	24V @ 750mA	17%	27.6 / 1.087	375 / 0.827	2	OB18-24*
24	10V @ 2.4A	5V @ 4.8A	16%	31.4 / 1.236	445 / 0.981	2	OB24-5
24	12V @ 2.0A	6V @ 4.0A	16%	31.4 / 1.236	445 / 0.981	2	OB24-6
24	18V @ 1.33A	9V @ 2.66A	16%	31.4 / 1.236	445 / 0.981	2	OB24-9
24	24V @ 1.0A	12V @ 2.0A	16%	31.4 / 1.236	445 / 0.981	2	OB24-12
24	30V @ 800mA	15V @ 1.6A	16%	31.4 / 1.236	445 / 0.981	2	OB24-15
24	36V @ 670mA	18V @ 1.34A	16%	31.4 / 1.236	445 / 0.981	2	OB24-18
24	48V @ 500mA	24V @ 1.0A	16%	31.4 / 1.236	445 / 0.981	2	OB24-24*
30	10V @ 3.0A	5V @ 6.0A	15%	35.8 / 1.409	530 / 1.169	2	OB30-5
30	12V @ 2.5A	6V @ 5.0A	15%	35.8 / 1.409	530 / 1.169	2	OB30-6
30	18V @ 1.67A	9V @ 3.33A	15%	35.8 / 1.409	530 / 1.169	2	OB30-9
30	24V @ 1.25A	12V @ 2.5A	15%	35.8 / 1.409	530 / 1.169	2	OB30-12
30	30V @ 1.0A	15V @ 2.0A	15%	35.8 / 1.409	530 / 1.169	2	OB30-15
30	36V @ 830mA	18V @ 1.67A	15%	35.8 / 1.409	530 / 1.169	2	OB30-18
30	48V @ 625mA	24V @ 1.25A	15%	35.8 / 1.409	530 / 1.169	2	OB30-24*

* These transformers meet VDE 0550 only.

