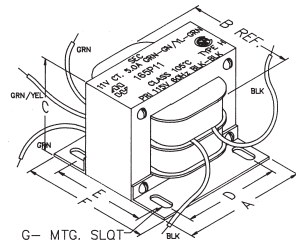


Cat. No.	VA Rating	Secondary (RMS)		Net Price
		VAC	Current (Amps)	
186B10	6.00	10VCT	0.60	\$14.18
186C10	12.00	10VCT	1.20	15.64
186D10	30.00	10VCT	3.00	20.12
186E10	50.00	10VCT	5.00	24.97
186F10	100.00	10VCT	10.00	34.55
186B12	6.30	12.6VCT	0.50	14.18
186C12	12.60	12.6VCT	1.00	15.64
186D12	31.50	12.6VCT	2.50	20.12
186E12	50.40	12.6VCT	4.00	24.97
186F12	100.8	12.6VCT	8.00	34.55
186B16	6.40	16VCT	0.40	14.18
186C16	12.80	16VCT	0.80	15.64
186D16	32.00	16VCT	2.00	20.12
186E16	56.00	16VCT	3.50	24.97
186F16	100.00	16VCT	6.25	34.55
186B20	6.00	20VCT	0.30	14.18
186C20	12.00	20VCT	0.60	15.64
186D20	30.00	20VCT	1.50	20.12
186E20	56.00	20VCT	2.80	24.97
186F20	100.00	20VCT	5.00	34.55
186B24	6.00	24VCT	0.25	14.18
186C24	12.00	24VCT	0.50	15.64
186D24	30.00	24VCT	1.25	20.12
186E24	57.60	24VCT	2.40	24.97
186F24	96.00	24VCT	4.00	34.55
186B28	5.60	28VCT	0.20	14.18
186C28	12.00	28VCT	0.42	15.64
186D28	30.00	28VCT	1.07	20.12
186E28	56.00	28VCT	2.00	24.97
186F28	100.00	28VCT	3.57	34.55
186B36	6.12	36VCT	0.17	14.18
186C36	12.60	36VCT	0.35	15.64
186D36	30.60	36VCT	0.85	20.12
186E36	54.00	36VCT	1.50	24.97
186F36	100.80	36VCT	2.80	34.55
186B48	6.00	48VCT	0.12	14.18
186C48	12.00	48VCT	0.25	15.64
186D48	30.00	48VCT	0.62	20.12
186E48	57.60	48VCT	1.20	24.97
186F48	96.00	48VCT	2.00	34.55
186B56	6.16	56VCT	0.11	14.18
186C56	12.30	56VCT	0.21	15.64
186D56	30.00	56VCT	0.53	20.12
186E56	56.00	56VCT	1.00	24.97
186F56	100.80	56VCT	1.80	34.55
186B120	6.00	120VCT	0.05	14.18
186C120	12.00	120VCT	0.10	15.64
186D120	30.00	120VCT	0.25	20.12
186E120	60.00	120VCT	0.50	24.97
186F120	102.00	120VCT	0.85	34.55



165 SERIES



L.V. RECTIFIER — FILAMENT OPEN FRAME 165 SERIES

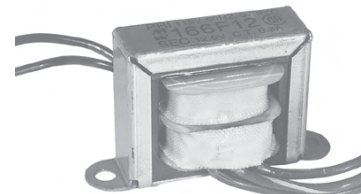
- High current, open, heavy duty "H", 4 slot mounting frame.
- 115V Primary, 60 Hz. — designed for continuous duty.
- All secondaries centre tapped, VAC (RMS).
- Minimum 6" long leads or copper tabs with holes.
- UL listed (#E50394) and CSA certified (#LR3902).
- Hi-pot test of 2000 V RMS.
- Class B insulation (130 degrees, C).
- Dual bobbin design—no electrostatic shield required.

OPEN HORIZONTAL MOUNTING TYPE H

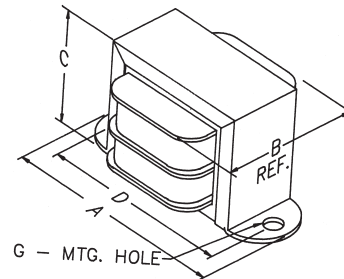
Mtg. Style	Dimensions						Mtg. Slot
	A	B	C	D	E	F	
H7	3.00	3.25	2.56	2.50	3.25	4.00	.22x.56
H9	3.75	2.63	3.13	3.13	2.50	3.25	.22x.56
H10	3.75	3.13	3.13	3.13	2.75	3.50	.22x.56
H12	3.75	3.63	3.13	3.13	3.25	4.00	.22x.56
H16	4.50	3.88	3.75	3.75	2.75	3.50	.28x.56
H18	4.50	4.38	3.75	3.75	3.25	4.00	.28x.56
H19	4.50	4.38	3.75	3.75	3.75	4.50	.28x.56

165 SERIES

Cat. No.	Secondary F.L. Volts	Amps.	Dim. Ref.	Net Price
TYPE H—OPEN HORIZONTAL FRAME				
165Z3	3.0 ct	50.0	H10	\$65.09
165X5	5.0 ct.	30.0	H9	64.36
165V7	7.5 ct	21.0	H9	65.60
165V10	10.0 ct	20.0	H10	71.27
165U11	11.0 ct	15.0	H9	63.22
165S12	12.6 ct	10.0	H7	60.16
165V12	12.6 ct	20.0	H12	76.20
165S18	18.0 ct	10.0	H10	65.56
165U18	18.0 ct	15.0	H16	75.69
165V18	18.0 ct	20.0	H18	86.51
165T22	22.0 ct	12.0	H16	77.49
165V22	22.0 ct	20.0	H19	96.53
165P25	25.0 ct	5.0	H7	64.85
165S25	25.0 ct	10.0	H12	73.09
165P30	30.0 ct	5.0	H7	58.96
165S30	30.0 ct	10.0	H16	79.84
165P60	60.0 ct	5.0	H16	78.07
165N80	80.0 ct	4.0	H18	81.21



166 SERIES



L.V. RECTIFIER — FILAMENT OPEN CHANNEL MOUNT 166 SERIES

- Open, 2 hole, channel bracket "C" mounting.
- 115V Primary, 60 Hz. — designed for continuous duty.
- All secondaries centre tapped, VAC (RMS)—except 166L22.
- Secondary leads minimum 6" long.
- UL listed (E50394) and CSA certified (LR3902).
- Hi-pot test of 2000 V RMS.
- Dual bobbin design—no electrostatic shield required.
- Class B insulation (130 degrees, C) for extra protection—UL listed as a class A (105 degree; C) design.

HORIZONTAL CHANNEL BRACKET TYPE C

Mtg. Style	Dimensions				Mtg. Hole
	A	B	C	D	
C0H	1.35	0.69	0.69	1.06	.125
C1H	1.63	0.88	0.81	1.38	.125
C2H	2.06	1.25	1.19	1.75	.187
C3H	2.06	1.38	1.19	1.75	.187
C4H	2.38	1.38	1.38	2.00	.187
C5H	2.38	1.50	1.38	2.00	.187
C6H	2.81	1.50	1.69	2.38	.187
C7H	2.81	1.63	1.69	2.38	.187
C8H	3.25	1.63	2.00	2.81	.187
C9H	3.25	1.75	2.00	2.81	.187
C10H	3.25	2.00	2.00	2.81	.187
C11H	3.69	1.88	2.31	3.13	.187
C12H	3.69	2.00	2.31	3.13	.187
C13H	3.69	2.13	2.31	3.13	.187
C14H	4.03	2.25	2.63	3.56	.187
C15H	4.03	2.50	2.63	3.56	.187
C16H	4.50	2.50	2.88	4.00	.203

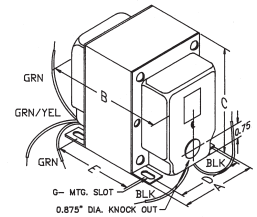
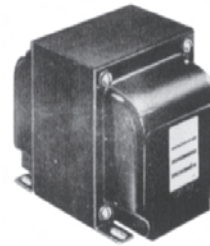
Continued on next page...

166 SERIES

Cat. No.	Secondary F.L. Volts	Amps.	Dim. Ref.	Net Price
TYPE C—CHANNEL BRACKET MOUNTING				
166F2	2.5 ct	0.25	C2H	\$22.85
166G2	2.5 ct	0.50	C2H	22.49
166J2	2.5 ct	1.00	C3H	22.85
166K2	2.5 ct	1.50	C4H	20.62
166L2	2.5 ct	2.50	C6H	21.56
166M2	2.5 ct	3.00	C6H	16.15
166Q2	2.5 ct	6.00	C8H	24.05
166S2	2.5 ct	10.00	C12H	26.18
166F5	5.0 ct	0.25	C2H	22.85
166G5	5.0 ct	0.50	C3H	22.60
166J5	5.0 ct	1.00	C5H	21.45
166M5	5.0 ct	3.00	C9H	16.15
166L5	5.0 ct	2.00	C7H	21.71
166R5	5.0 ct	8.0	C12H	32.76
166RS	5.0 ct	8.0	C16H	26.93
166S5	5.0 ct	10.0	C13H	32.38
166U5	5.0 ct	15.0	C14H	37.13
166V5	5.0 ct	20.0	C16H	45.29
166E6	6.3 ct	0.15	C2H	22.22
166F6	6.3 ct	0.30	C3H	22.15
166G6	6.3 ct	0.60	C4H	19.96
166J6	6.3 ct	1.00	C6H	21.55
166K6	6.3 ct	1.20	C6H	21.24
166L6	6.3 ct	2.00	C7H	21.67
166N6	6.3 ct	4.00	C9H	22.96
166Q6	6.3 ct	6.0	C12H	31.73
166S6	6.3 ct	10.0	C14H	37.62
166G7	7.0 ct	0.70	C5H	21.09
166U7	7.5 ct	15.0	C16H	47.78
166G8	8.0 ct	0.50	C4H	19.96
166J8	8.5 ct	1.00	C6H	21.76
166L8	8.5 ct	2.00	C8H	22.29
166M8	8.5 ct	3.00	C9H	23.02
166N8	8.5 ct	4.00	C10H	23.53
166G9	9.0 ct	0.50	C4H	19.96
166F10	10.0 ct	0.30	C3H	22.40
166G10	10.0 ct	0.50	C5H	20.89
166J10	10.0 ct	1.00	C7H	21.71
166L10	10.0 ct	2.0	C9H	22.51
166M10	10.0 ct	3.0	C10H	23.24
166N10	10.0 ct	4.0	C12H	32.11
166P10	10.0 ct	5.0	C13H	32.73
166R10	10.0 ct	8.0	C15H	38.65
166S10	10.0 ct	10.0	C16H	42.58
166P11	11.0 ct	5.0	C13H	31.95
166S11	11.0 ct	10.0	C16H	43.55
166C12	6.3/12.6 ct	.1/.05	C2H	23.13
166E12	12.0 ct	.15	C3H	23.11
166K12	12.0 ct	1.2	C8H	22.07
166F12	12.6 ct	0.3	C4H	20.04
166G12	12.6 ct	0.5	C6H	21.25
166J12	12.6 ct	1.0	C7H	22.02
166L12	12.6 ct	2.5	C10H	24.42
166N12	12.6 ct	4.0	C13H	28.25
166Q12	12.6 ct	6.0	C14H	35.33
166R12	12.6 ct	8.0	C16H	39.18
166E14	14.0 ct	0.15	C3H	23.13
166G14	14.0 ct	0.5	C6H	21.31
166J14	14.0 ct	1.0	C7H	22.02
166L14	14.0 ct	2.0	C10H	23.05
166Q14	14.0 ct	6.0	C15H	38.65
166F16	16.0 ct	0.25	C4H	20.51
166G16	16.0 ct	0.5	C6H	21.36
166J16	16.0 ct	1.0	C8H	22.24
166L16	16.0 ct	2.2	C10H	23.69
166M16	16.0 ct	3.0	C13H	28.22
166B18	9.0/18.0 ct	.06/.03	C2H	23.24
166K18	18.0 ct	1.5	C9H	23.11
166M18	18.0 ct	3.0	C13H	32.45
166P18	18.0 ct	5.0	C15H	37.71
166D20	20.0 ct	0.1	C3H	23.18
166E20	20.0 ct	0.15	C3H	23.33
166F20	20.0 ct	0.3	C5H	22.44
166G20	20.0 ct	0.5	C7H	21.31
166J20	20.0 ct	1.0	C9H	22.55
166L20	20.0 ct	2.0	C11H	30.71
166L22	22.0 ct	2.0	C13H	27.27
166A24	12.6/25.2 ct	.05/.025	C2H	23.33
166C24	24.0 ct	.085	C3H	23.00
166L24	24.0 ct	2.0	C13H	27.44
166N24	24.0 ct	4.0	C16H	38.22
166D25	25.0 ct	0.1	C3H	23.27
166E25	25.0 ct	0.15	C4H	20.09
166F25	25.0 ct	0.3	C6H	21.29
166G25	25.0 ct	0.5	C7H	21.67
166J25	25.0 ct	1.0	C9H	23.00
166K25	25.0 ct	1.5	C11H	26.87
166L25	25.0 ct	2.0	C13H	27.69
166M25	25.0 ct	3.0	C14H	34.35

166 SERIES (CONTINUED)

Cat. No.	Secondary F.L. Volts	Amps.	Dim. Ref.	Net Price
166F28	28.0 ct	0.25	C6H	\$21.25
166G28	28.0 ct	0.5	C7H	21.96
166J28	28.0 ct	1.0	C10H	23.02
166L28	28.0 ct	2.0	C13H	31.53
166E30	30.0 ct	0.15	C4H	20.25
166F30	30.0 ct	0.25	C6H	21.35
166G30	30.0 ct	0.50	C8H	21.78
166J33	33.0 ct	1.0	C10H	23.67
166K35	35.0 ct	1.5	C13H	28.00
166E36	36.0 ct	0.15	C5H	21.36
166F36	36.0 ct	0.3	C7H	21.56
166G36	36.0 ct	0.5	C8H	22.07
166J36	36.0 ct	1.0	C11H	26.91
166L42	42.0 ct	2.0	C15H	37.04
166E44	44.0 ct	0.15	C6H	21.29
166F44	44.0 ct	0.25	C7H	21.56
166G44	44.0 ct	0.50	C9H	22.35
166J44	44.0 ct	1.0	C12H	28.04
166C50	50.0 ct	0.075	C4H	21.04
166F50	50.0 ct	0.3	C8H	21.87
166G50	50.0 ct	0.5	C9H	22.69
166J50	50.0 ct	1.0	C13H	27.75
166L50	50.0 ct	2.0	C16H	37.96
166G60	60.0 ct	0.5	C10H	23.89
166G80	80.0 ct	0.5	C11H	27.44
166G100	100.0 ct	0.5	C13H	27.84
166F120	120.0 ct	0.3	C11H	26.51



167 SERIES

L.V. RECTIFIER—FILAMENT ENCLOSED SHIELDED 167 SERIES

- Enclosed, 4 slot, "X" mounting.
- 115V Primary, 60 Hz. —designed for continuous duty.
- All secondaries centre tapped VAC (RMS).
- Secondary leads minimum 6" long.
- UL listed (#E50394) and CSA certified (#LR3902).
- Hi-pot test of 2000 V RMS.
- Dual bobbin design—no electrostatic shield required.
- Class B insulation (130 degrees C).

167 SERIES—ENCLOSED VERTICAL MOUNTING TYPE X

Mtg. Style	Dimensions					Mtg. Slot
	A	B±1/16"	C	D	E±1/16"	
X1	1.88	2.19	2.50	1.50	1.31	.19 x .31
X2	1.88	2.44	2.50	1.50	1.56	.19 x .31
X3	2.19	2.38	2.63	1.75	1.31	.19 x .25
X4	2.19	2.50	2.63	1.75	1.44	.19 x .25
X5	2.19	2.63	2.63	1.75	1.56	.19 x .25
X6	2.50	2.75	3.06	2.00	1.69	.203 x .38
X7	2.50	3.00	3.06	2.00	1.94	.203 x .38
X8	2.50	3.25	3.06	2.00	2.19	.203 x .38
X9	2.50	3.75	3.06	2.00	2.69	.203 x .38
X10	3.13	3.50	3.81	2.50	2.19	.203 x .38
X11	3.13	3.75	3.81	2.50	2.44	.203 x .38
X13	3.75	4.00	4.56	3.00	2.81	.203 x .38
X14	3.75	4.50	4.56	3.00	3.31	.203 x .38
X15	3.75	5.00	4.56	3.00	3.81	.203 x .38
X16	3.75	5.50	4.56	3.00	4.31	.203 x .38

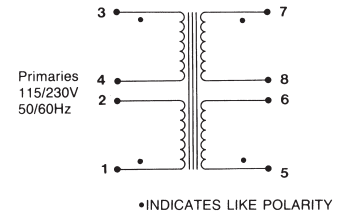
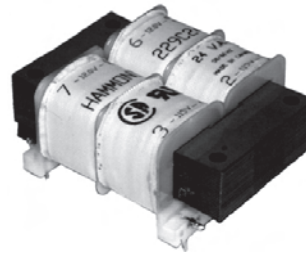
Continued on next page...

Hammond Power Transformers

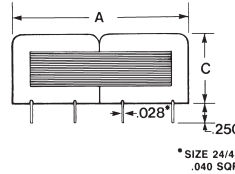
MANU
195
CODE

167 SERIES

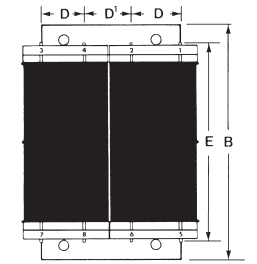
Cat. No.	Secondary F.L. Volts	Amps.	Dim. Ref.	Net Price
TYPE X—4-HOLE MOUNT				
167M5	5.0 ct	3.00	X1	\$28.95
167Q5	5.0 ct	6.00	X2	31.73
167R5	5.0 ct	8.00	X4	38.69
167S5	5.0 ct	10.00	X5	38.02
167U5	5.0 ct	15.00	X6	43.44
167V5	5.0 ct	20.0	X8	50.58
167X5	5.0 ct	30.0	X10	58.29
167N6	6.3 ct	4.0	X2	29.93
167Q6	6.3 ct	6.0	X3	36.00
167R6	6.3 ct	8.0	X5	37.93
167S6	6.3 ct	10.0	X6	42.87
167T6	6.3 ct	12.0	X6	42.33
167U6	6.3 ct	16.0	X8	48.04
167U7	7.5 ct	15.0	X8	51.31
167V7	7.5 ct	21.0	X10	59.24
167N10	10.0 ct	4.0	X4	34.44
167P10	10.0 ct	5.0	X5	34.29
167R10	10.0 ct	8.0	X7	46.13
167S10	10.0 ct	10.0	X8	47.78
167P11	11.0 ct	5.0	X6	40.73
167S11	11.0 ct	10.0	X8	48.51
167U11	11.0 ct	15.0	X10	60.93
167L12	12.6 ct	2.5	X2	29.67
167N12	12.6 ct	4.0	X5	34.29
167Q12	12.6 ct	6.0	X6	41.55
167R12	12.6 ct	8.0	X8	48.05
167S12	12.6 ct	10.0	X9	54.04
167V12	12.6 ct	20.0	X13	73.91
167N14	14.0 ct.	4.0	X6	40.64
167Q14	14.0 ct.	6.0	X7	44.87
167M16	16.0 ct	3.0	X5	34.09
167P16	16.0 ct	5.0	X7	44.64
167M18	18.0 ct	3.0	X6	39.75
167P18	18.0 ct	5.0	X7	45.49
167S18	18.0 ct	10.0	X11	64.89
167U18	18.0 ct	15.0	X13	76.22
167V18	18.0 ct	20.0	X14	85.60
167M20	20.0 ct	3.0	X6	40.69
167P20	20.0 ct	5.0	X8	45.65
167U20	20.0 ct	16.0	X14	81.96
167T22	22.0 ct	12.0	X13	75.33
167V22	22.0 ct	20.0	X15	93.09
167L24	24.0 ct	2.0	X5	33.29
167J25	25.0 ct	1.0	X2	29.13
167K25	25.0 ct	1.5	X3	33.45
167M25	25.0 ct	3.0	X6	42.02
167N25	25.0 ct	4.0	X8	47.13
167P25	25.0 ct	5.0	X9	52.87
167S25	25.0 ct	10.0	X13	73.98
167J28	28.0 ct	1.0	X2	29.24
167L28	28.0 ct	2.0	X6	39.96
167M28	28.0 ct	3.0	X7	44.84
167K30	30.0 ct	1.5	X4	34.07
167M30	30.0 ct	3.0	X7	45.49
167P30	30.0 ct	5.0	X10	53.24
167S30	30.0 ct	10.0	X13	77.96
167J33	33.0 ct	1.0	X2	29.91
167J36	36.0 ct.	1.0	X3	33.20
167L36	36.0 ct.	2.0	X6	41.24
167M36	36.0 ct.	3.0	X8	47.69
167P36	36.0 ct.	5.0	X11	60.31
167R36	36.0 ct.	8.0	X13	76.16
167T36	36.0 ct.	12.0	X15	92.78
167L44	44.0 ct.	2.0	X7	45.00
167J50	50.0 ct.	1.0	X5	35.80
167L50	50.0 ct.	2.0	X8	45.96
167P50	50.0 ct.	5.0	X13	69.42
167G55	55.0 ct	0.5	X2	29.04
167J55	55.0 ct	1.0	X6	37.65
167L55	55.0 ct	2.0	X8	46.64
167G60	60.0 ct	0.5	X2	29.20
167J60	60.0 ct	1.0	X6	40.25
167L60	60.0 ct	2.0	X9	51.67
167M60	60.0 ct	3.0	X11	60.73
167P60	60.0 ct	5.0	X13	72.84
167S64	64.0 ct	10.0	X16	124.71
167L70	70.0 ct	2.0	X9	52.98
167N70	70.0 ct	4.0	X13	71.75
167G80	80.0 ct	0.5	X4	34.02
167J80	80.0 ct	1.0	X7	44.27
167L80	80.0 ct	2.0	X10	54.38
167N80	80.0 ct	4.0	X14	77.09
167G100	100.0 ct	0.5	X5	34.80
167J100	100.0 ct	1.0	X8	47.05
167P100	100.0 ct	5.0	X16	106.75
167G120	120.0 ct	0.5	X6	21.35
167H200	200.0 ct.	0.87	X11	59.69



• INDICATES LIKE POLARITY



* SIZE 24/48 .040 SGR.



L.V. RECTIFIER—LOW PROFILE P.C. BOARD MOUNT 229 SERIES

- Low profile, split winding design, balanced windings.
- Low primary to secondary coupling, balanced windings, no electrostatic shield required and low EMF radiation due to semi-toroidal design.
- 115/230 V dual primary windings, dual secondary windings, 50/60 Hz.
- CSA certified (File #LR3902) & UL recognized (File #E50394)
- High insulation - Hipot of 1.750 RMS
- Class B insulation - 130 degrees C.

VA Size	Regulation	PC Card Spacing	Dimensions					
			A	B	C	D	D'	E
2	30%	.75	1.56	1.88	.65	.38	.38	1.60
6	30%	1.0	1.56	1.88	.85	.38	.38	1.60
12	20%	1.25	2.00	2.50	1.07	.50	.50	2.00
24	15%	1.5	2.25	2.87	1.25	.60	.53	1.90
48	15%	1.5	2.50	3.12	1.38	.60	.66	2.18

All dimensions in inches

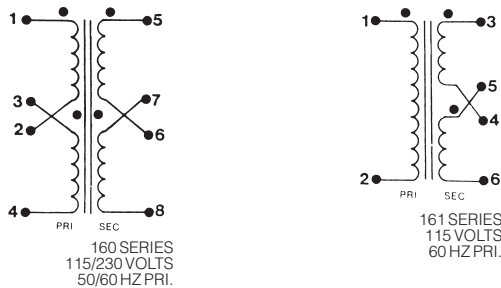
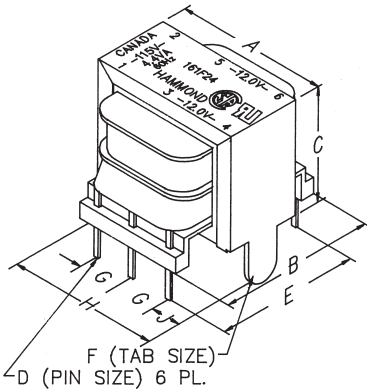
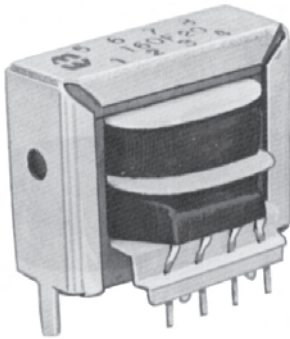
229 SERIES LOW PROFILE POWER TRANSFORMERS

Cat. No.	VA Size	Secondary				Net Price
		Series		Parallel		
		Volts (ct)	mA	Volts	mA	
229 E10	2	10	250	5	500	\$16.55
229 A10	6	10	600	5	1200	17.27
229 B10	12	10	1200	5	2400	22.73
229 C10	24	10	2400	5	4800	25.45
229 D10	48	10	4800	5	9600	28.18
229 E12	2	12.6	200	6.3	400	16.55
229 A12	6	12.6	450	6.3	900	17.27
229 B12	12	12.6	900	6.3	1800	22.73
229 C12	24	12.6	1900	6.3	3800	25.45
229 D12	48	12.6	3800	6.3	7600	28.18
229 E16	2	16	150	8	300	16.55
229 A16	6	16	350	8	700	17.27
229 B16	12	16	700	8	1400	22.73
229 C16	24	16	1500	8	3000	25.45
229 D16	48	16	3000	8	6000	28.18
229 E20	2	20	125	10	250	16.55
229 A20	6	20	300	10	600	17.27
229 B20	12	20	600	10	1200	22.73
229 C20	24	20	1200	10	2400	25.45
229 D20	48	20	2400	10	4800	28.18
229 E24	2	24	100	12	200	16.55
229 A24	6	24	250	12	500	17.27
229 B24	12	24	500	12	1000	22.73
229 C24	24	24	1000	12	2000	25.45
229 D24	48	24	2000	12	4000	28.18
229 E30	2	30	85	15	170	16.55
229 A30	6	30	200	15	400	17.27
229 B30	12	30	400	15	800	22.73
229 C30	24	30	800	15	1600	25.45
229 D30	48	30	1600	15	3200	28.18
229 E34	2	34	75	17	150	16.55
229 A34	6	34	170	17	340	17.27
229 B34	12	34	340	17	680	22.73
229 C34	24	34	700	17	1400	25.45
229 D34	48	34	1400	17	2800	28.18
229 E40	2	40	60	20	120	16.55
229 A40	6	40	150	20	300	17.27
229 B40	12	40	300	20	600	22.73
229 C40	24	40	600	20	1200	25.45
229 D40	48	40	1200	20	2400	28.18

Continued on next page...

229 SERIES LOW PROFILE POWER TRANSFORMERS

Cat. No.	VA Size	Secondary				Net Price
		Series		Parallel		
		Volts (ct)	mA	Volts	mA	
229 E56	2	56	45	28	90	\$16.55
229 A56	6	56	100	28	200	17.27
229 B56	12	56	200	28	400	22.73
229 C56	24	56	425	28	850	25.45
229 D56	48	56	850	28	1700	28.18
229 E88	2	88	28	44	56	16.55
229 A88	6	88	65	44	130	17.27
229 B88	12	88	130	44	260	22.73
229 A120	6	120	50	60	100	17.27
229 E120	2	120	20	60	40	16.55
229 B120	12	120	100	60	200	22.73
229 E230	2	230	10	115	20	16.55
229 A230	6	230	25	115	50	17.27
229 B230	12	230	50	115	100	22.73



LOW VOLTAGE RECTIFIER TRANSFORMERS, OPEN—P.C. MOUNTING 160/161 SERIES

- Vertical mount, split bobbin design
- Dual winding secondaries, non-concentrically wound
- Suitable for single or dual bridge or full-wave centre-tap rectifier circuits
- Winding to pin arrangements allow for easy P.C. board layouts
- Ratings interchangeable with current design practice in the industry
- Insulated for hi-pot of 2,000 V RMS
- 160 Series—115/230 volts, 50/60Hz using split bobbin 8-pins—no electrostatic shield necessary
- 161 Series—115 volts, 60Hz—satisfies majority of needs
- CSA certified (File #LR3902) and UL recognized (File #E50394)

DIMENSIONS (ALL DIMENSIONS IN INCHES.)

(VA) Size	A	B	C	D	E	F	G	H	J
0.5	1.00	0.94	0.84	.025 SQ.	0.78	N/A	0.20	N/A	N/A
1.0	1.00	1.375	0.83	.018 x .041	1.20	N/A	0.20	N/A	N/A
1.2	1.38	1.19	1.22	.018 x .041	1.00	N/A	0.20	N/A	N/A
4.4	1.69	1.25	1.45	.018 x .041	1.10	.125 x .030	0.25	1.671	.436
10.0	1.94	1.44	1.69	.018 x .041	1.30	.188 x .030	0.25	1.891	.546
24.0	1.625	2.25	1.375	.018 x .041	2.10	N/A	0.25	N/A	N/A

160/161 SERIES P.C. MOUNTED LOW VOLTAGE RECTIFIER TRANSFORMERS

Cat. No.	Secondary				Size (VA)	Net Price
	Series		Parallel			
	Volts (ct)	mA	Volts	mA		

PRIMARY SINGLE 115V

161C10	10	50	5	100	.5	\$12.73
161D10‡	10	90	5	180	1.0	15.45
161FA10	10	120	5	240	1.2	12.73
161GA10	10	440	5	880	4.4	13.64
161J10	10	1000	5	2000	10.0	13.64
161H10‡	10	2400	5	4800	24.0	26.36
161C12	12.6	40	6.3	80	.5	12.73
161D12‡	12.6	70	6.3	140	1.0	15.45
161FA12	12.6	100	6.3	200	1.2	12.73
161GA12	12.6	350	6.3	700	4.4	13.64
161K12	12.6	800	6.3	1600	10.0	13.64
161H12‡	12.6	2000	6.3	4000	24.0	26.36
161C16	16	31.3	8	62.5	.5	12.73
161D16‡	16	55	8	110	1.0	15.45
161EA16	16	75	8	150	1.2	11.82
161FA16	16	260	8	520	4.4	12.73
161G16	16	640	8	1280	10.0	13.64
161H16‡	16	1500	8	3000	24.0	26.36
161D20‡	20	45	10	90	1.0	15.45
161EA20	20	60	10	120	1.2	11.82
161FA20	20	220	10	440	4.4	12.73
161G20	20	500	10	1000	10.0	13.64
161H20‡	20	1200	10	2400	24.0	26.36
161D24‡	24	35	12	70	1.0	15.45
161E24	24	50	12	100	1.2	11.82
161F24	24	180	12	360	4.4	12.73
161G24	24	450	12	900	10.0	13.64
161H24‡	24	1000	12	2000	24.0	26.36
161D28‡	28	30	14	60	1.0	15.45
161E28	28	40	14	80	1.2	11.82
161F28	28	160	14	320	4.4	12.73
161G28	28	360	14	720	10.0	13.64
161H28‡	28	800	14	1600	24.0	26.36
161D34‡	34	25	17	50	1.0	15.45
161E34	34	35	17	70	1.2	11.82
161F34	34	125	17	250	4.4	12.73
161G34	34	300	17	600	10.0	13.64
161H34‡	34	700	17	1400	24.0	26.36
161D40‡	40	20	20	40	1.0	15.45
161E40	40	30	20	60	1.2	11.82
161F40	40	110	20	220	4.4	12.73
161G40	40	250	20	500	10.0	13.64
161H40‡	40	600	20	1200	24.0	26.36
161D56‡	56	15	28	30	1.0	15.45
161E56	56	20	28	40	1.2	11.82
161F56	56	80	28	160	4.4	12.73
161G56	56	180	28	360	10.0	13.64
161H56‡	56	420	28	840	24.0	26.36

PRIMARY DUAL 115/230

160D10‡	10	90	5	180	1.0	18.18
160F10	10	120	5	240	1.2	13.64
160G10	10	440	5	880	4.4	14.55
160J10	10	1000	5	2000	10.0	14.55
160H10‡	10	2400	5	4800	24.0	27.27
160D12‡	12.6	70	6.3	140	1.0	18.18
160F12	12.6	100	6.3	200	1.2	13.64
160G12	12.6	350	6.3	700	4.4	14.55
160K12	12.6	800	6.3	1600	10.0	14.55
160H12‡	12.6	2000	6.3	4000	24.0	27.27
160D16‡	16	55	8	110	1.0	18.18
160E16	16	75	8	150	1.2	12.73
160F16	16	260	8	520	4.4	13.64
160G16	16	640	8	1280	10.0	14.55
160H16‡	16	1500	8	3000	24.0	27.27
160D20‡	20	45	10	90	1.0	18.18
160E20	20	60	10	120	1.2	12.73
160F20	20	220	10	440	4.4	13.64
160G20	20	500	10	1000	10.0	14.55
160H20‡	20	1200	10	2400	24.0	27.27
160D24‡	24	35	12	70	1.0	18.18
160E24	24	50	12	100	1.2	12.73
160F24	24	180	12	360	4.4	13.64
160G24	24	450	12	900	10.0	14.55
160H24‡	24	1000	12	2000	24.0	27.27

‡No channel mounting bracket on these sizes.

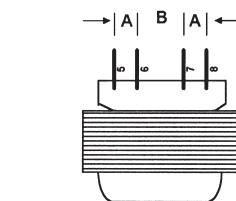
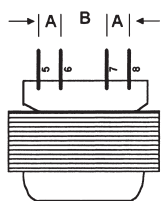
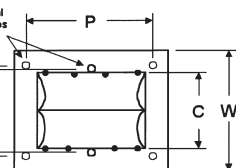
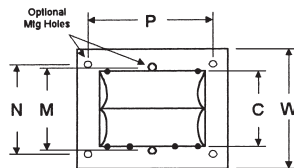
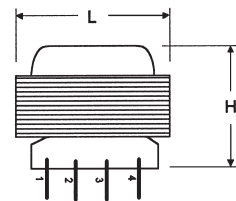
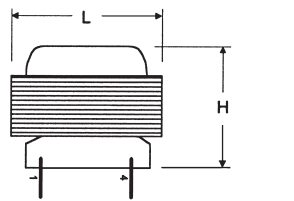
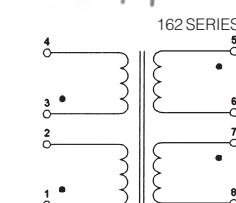
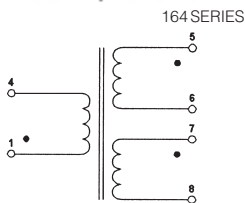
Continued on next page...

Hammond Power Transformers

160/161 SERIES P.C. MOUNTED LOW VOLTAGE RECTIFIER TRANSFORMERS (CONTINUED)

Cat. No.	Secondary				Size (VA)	Net Price
	Series		Parallel			
	Volts (ct)	mA	Volts	mA		
PRIMARY DUAL 115/230						
160D28‡	28	30	14	60	1.0	\$18.18
160E28	28	40	14	80	1.2	12.73
160F28	28	160	14	320	4.4	13.64
160G28	28	360	14	720	10.0	14.55
160H28‡	28	800	14	1600	24.0	27.27
160D34‡	34	25	17	50	1.0	18.18
160E34	34	35	17	70	1.2	12.73
160F34	34	125	17	250	4.4	13.64
160G34	34	300	17	600	10.0	14.55
160H34‡	34	700	17	1400	24.0	27.27
160D40‡	40	20	20	40	1.0	18.18
160E40	40	30	20	60	1.2	12.73
160F40	40	110	20	220	4.4	13.64
160G40	40	250	20	500	10.0	14.55
160H40‡	40	600	20	1200	24.0	27.27
160D56‡	56	15	28	30	1.0	18.18
160E56	56	20	28	40	1.2	12.73
160F56	56	80	28	160	4.4	13.64
160G56	56	180	28	360	10.0	14.55
160H56‡	56	420	28	840	24.0	27.27
160D120‡	120	8	60	16	1.0	18.18
160E120	120	10	60	20	1.2	12.73
160F120	120	35	60	70	4.4	13.64
160G120	120	85	60	170	10.0	14.55
160H120‡	120	200	60	400	24.0	27.27

‡No channel mounting bracket on these sizes.



L.V. POWER TRANSFORMERS HORIZONTAL P.C. BOARD MOUNT 164/162 SERIES

- Dual winding secondaries, low profile, split bobbin design
- Low primary to secondary coupling—no electrostatic shield required
- Choice of economical single primary 115V (164 series) or universal dual primary 115/230V (162 series)—either model 50/60 Hz operation
- High insulation—Hipot of 2,500V RMS
- P.C. board mount—standard pin spacing
- CSA certified (File #LR3902) and UL recognized (File #E50394)

DIMENSIONS (ALL DIMENSIONS IN INCHES)

(VA) Size	L	W	H	A	B	C	M	N	P	MTG. Screw	lbs.
1.1	1 3/8	1 1/8	1 1/16	.25	.25	1.20	—	—	—	—	0.17
2.4	1 3/8	1 1/8	1 1/16	.25	.25	1.20	—	—	—	—	0.25
6.0	1 1/8	1 1/16	1 1/16	.25	.25	1.28	1 1/16	—	—	#4	0.44
12	1 1/8	1 1/16	1 1/2	.30	.40	1.41	1 1/4	—	—	#4	0.70
20	2 1/4	1 7/8	1 7/16	.30	.40	1.60	1 1/2	—	—	#4	0.80
36	2 3/8	2 1/16	1 1/16	.40	.40	1.85	—	1 3/4	2 3/16	#6	1.10

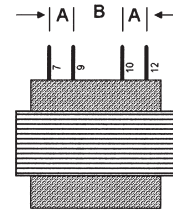
SINGLE PRIMARY 115V

Cat. No.	VA	Secondary (RMS)		Net Price
		Series	Parallel	
164D10	1.1	10V.C.T.@.11A	5V@.22A	\$11.36
164E10	2.4	10V.C.T.@.25A	5V@.5A	11.44
164F10	6.0	10V.C.T.@.6A	5V@1.2A	13.15
164G10	12.0	10V.C.T.@1.2A	5V@2.4A	14.87
164H10	20.0	10V.C.T.@2A	5V@4.0A	17.85
164J10	36.0	10V.C.T.@3.6A	5V@7.2A	21.67
164D12	1.1	12.6V.C.T.@.09A	6.3V@.18A	11.36
164E12	2.4	12.6V.C.T.@.2A	6.3V@.4A	11.44
164F12	6.0	12.6V.C.T.@.5A	6.3V@1.0A	13.15
164G12	12.0	12.6V.C.T.@1.0A	6.3V@2.0A	14.87
164H12	20.0	12.6V.C.T.@1.6A	6.3V@3.2A	17.85
164J12	36.0	12.6V.C.T.@2.85A	6.3V@5.7A	21.67
164D16	1.1	16V.C.T.@.07A	8V@.14A	11.36
164E16	2.4	16V.C.T.@.15A	8V@.3A	11.44
164F16	6.0	16V.C.T.@.4A	8V@.8A	13.15
164G16	12.0	16V.C.T.@.8A	8V@1.6A	14.87
164H16	20.0	16V.C.T.@1.25A	8V@2.5A	17.85
164J16	36.0	16V.C.T.@2.25A	8V@4.5A	21.67
164D20	1.1	20V.C.T.@.055A	10V@.11A	11.36
164E20	2.4	20V.C.T.@.12A	10V@.24A	11.44
164F20	6.0	20V.C.T.@.3A	10V@.6A	13.15
164G20	12.0	20V.C.T.@.6A	10V@1.2A	14.87
164H20	20.0	20V.C.T.@1A	10V@2.0A	17.85
164J20	36.0	20V.C.T.@1.8A	10V@3.6A	21.67
164D24	1.1	24V.C.T.@.045A	12V@.09A	11.36
164E24	2.4	24V.C.T.@.1A	12V@.2A	11.44
164F24	6.0	24V.C.T.@.25A	12V@.5A	13.15
164G24	12.0	24V.C.T.@.5A	12V@1.0A	14.87
164H24	20.0	24V.C.T.@.8A	12V@1.6A	17.85
164J24	36.0	24V.C.T.@1.5A	12V@3.0A	21.67
164D28	1.1	28V.C.T.@.04A	14V@.08A	11.36
164E28	2.4	28V.C.T.@.085A	14V@.17A	11.44
164F28	6.0	28V.C.T.@.2A	14V@.4A	13.15
164G28	12.0	28V.C.T.@.42A	14V@.84A	14.87
164H28	20.0	28V.C.T.@.7A	14V@1.4A	17.85
164J28	36.0	28V.C.T.@1.3A	14V@2.6A	21.67
164D36	1.1	36V.C.T.@.03A	18V@.06A	11.36
164E36	2.4	36V.C.T.@.065A	18V@.13A	11.44
164F36	6.0	36V.C.T.@.17A	18V@.34A	13.15
164G36	12.0	36V.C.T.@.35A	18V@.7A	14.87
164H36	20.0	36V.C.T.@.55A	18V@1.1A	17.85
164J36	36.0	36V.C.T.@1.0A	18V@2.0A	21.67
164D48	1.1	48V.C.T.@.023A	24V@.046A	11.36
164E48	2.4	48V.C.T.@.05A	24V@.1A	11.44
164F48	6.0	48V.C.T.@.125A	24V@.25A	13.15
164G48	12.0	48V.C.T.@.25A	24V@.5A	14.87
164H48	20.0	48V.C.T.@.4A	24V@.8A	17.85
164J48	36.0	48V.C.T.@.75A	24V@1.5A	21.67
164D56	1.1	56V.C.T.@.02A	28V@.04A	11.36
164E56	2.4	56V.C.T.@.045A	28V@.09A	11.44
164F56	6.0	56V.C.T.@.11A	28V@.22A	13.15
164G56	12.0	56V.C.T.@.22A	28V@.44A	14.87
164H56	20.0	56V.C.T.@.35A	28V@.7A	17.85
164J56	36.0	56V.C.T.@.65A	28V@1.3A	21.67
164D120	1.1	120V.C.T.@.01A	60V@.02A	11.36
164E120	2.4	120V.C.T.@.02A	60V@.04A	11.44
164F120	6.0	120V.C.T.@.05A	60V@.1A	13.15
164G120	12.0	120V.C.T.@.1A	60V@.2A	14.87
164H120	20.0	120V.C.T.@.16A	60V@.32A	17.85
164J120	36.0	120V.C.T.@.3A	60V@.6A	21.67

Continued on next page...

DUAL PRIMARY 115/230V

Cat. No.	VA	Secondary (RMS)		Net Price
		Series	Parallel	
162D10	1.1	10V C.T. @ .11A	5V @ .22A	\$13.22
162E10	2.4	10V C.T. @ .25A	5V @ .5A	13.38
162F10	6.0	10V C.T. @ .6A	5V @ 1.2A	14.49
162G10	12.0	10V C.T. @ 1.2A	5V @ 2.4A	16.67
162H10	20.0	10V C.T. @ 2A	5V @ 4.0A	20.33
162J10	36.0	10V C.T. @ 3.6A	5V @ 7.2A	24.29
162D12	1.1	12.6V C.T. @ .09A	6.3V @ .18A	13.22
162E12	2.4	12.6V C.T. @ .2A	6.3V @ .4A	13.38
162F12	6.0	12.6V C.T. @ .5A	6.3V @ 1.0A	14.49
162G12	12.0	12.6V C.T. @ 1.0A	6.3V @ 2.0A	16.67
162H12	20.0	12.6V C.T. @ 1.6A	6.3V @ 3.2A	20.33
162J12	36.0	12.6V C.T. @ 2.85A	6.3V @ 5.7A	24.29
162D16	1.1	16V C.T. @ .07A	8V @ .14A	13.22
162E16	2.4	16V C.T. @ .15A	8V @ .3A	13.38
162F16	6.0	16V C.T. @ .4A	8V @ .8A	14.49
162G16	12.0	16V C.T. @ .8A	8V @ 1.6A	16.67
162H16	20.0	16V C.T. @ 1.25A	8V @ 2.5A	20.33
162J16	36.0	16V C.T. @ 2.25A	8V @ 4.5A	24.29
162D20	1.1	20V C.T. @ .055A	10V @ .11A	13.22
162E20	2.4	20V C.T. @ .12A	10V @ .24A	13.38
162F20	6.0	20V C.T. @ .3A	10V @ .6A	14.49
162G20	12.0	20V C.T. @ .6A	10V @ 1.2A	16.67
162H20	20.0	20V C.T. @ 1A	10V @ 2.0A	20.33
164J20	36.0	20V C.T. @ 1.8A	10V @ 3.6A	21.67
162D24	1.1	24V C.T. @ .045A	12V @ .09A	13.22
162E24	2.4	24V C.T. @ .1A	12V @ .2A	13.38
162F24	6.0	24V C.T. @ .25A	12V @ .5A	14.49
162G24	12.0	24V C.T. @ .5A	12V @ 1.0A	16.67
162H24	20.0	24V C.T. @ .8A	12V @ 1.6A	20.33
162J24	36.0	24V C.T. @ 1.5A	12V @ 3.0A	24.29
162D28	1.1	28V C.T. @ .04A	14V @ .08A	13.22
162E28	2.4	28V C.T. @ .085A	14V @ .17A	13.38
162F28	6.0	28V C.T. @ .2A	14V @ .4A	14.49
162G28	12.0	28V C.T. @ .42A	14V @ .84A	16.67
162H28	20.0	28V C.T. @ .7A	14V @ 1.4A	20.33
162J28	36.0	28V C.T. @ 1.3A	14V @ 2.6A	24.29
162D36	1.1	36V C.T. @ .03A	18V @ .06A	13.22
162E36	2.4	36V C.T. @ .065A	18V @ .13A	13.38
162F36	6.0	36V C.T. @ .17A	18V @ .34A	14.49
162G36	12.0	36V C.T. @ .35A	18V @ .7A	16.67
162H36	20.0	36V C.T. @ .55A	18V @ 1.1A	20.33
162J36	36.0	36V C.T. @ 1.0A	18V @ 2.0A	24.29
162D48	1.1	48V C.T. @ .023A	24V @ .046A	13.22
162E48	2.4	48V C.T. @ .05A	24V @ .1A	13.38
162F48	6.0	48V C.T. @ .125A	24V @ .25A	14.49
162G48	12.0	48V C.T. @ .25A	24V @ .5A	16.67
162H48	20.0	48V C.T. @ .4A	24V @ .8A	20.33
162J48	36.0	48V C.T. @ .75A	24V @ 1.5A	24.29
162D56	1.1	56V C.T. @ .02A	28V @ .04A	13.22
162E56	2.4	56V C.T. @ .045A	28V @ .09A	13.38
162F56	6.0	56V C.T. @ .11A	28V @ .22A	14.49
162G56	12.0	56V C.T. @ .22A	28V @ .44A	16.67
162H56	20.0	56V C.T. @ .35A	28V @ .7A	20.33
162J56	36.0	56V C.T. @ .65A	28V @ 1.3A	24.29
162D120	1.1	120V C.T. @ .01A	60V @ .02A	13.22
162E120	2.4	120V C.T. @ .02A	60V @ .04A	13.38
162F120	6.0	120V C.T. @ .05A	60V @ .1A	14.49
162G120	12.0	120V C.T. @ .1A	60V @ .2A	16.67
162H120	20.0	120V C.T. @ .16A	60V @ .32A	20.33
162J120	36.0	120V C.T. @ .3A	60V @ .6A	24.29



L.V. POWER INTERNATIONAL TRANSFORMERS HORIZONTAL P.C. BOARD MOUNT 183 SERIES

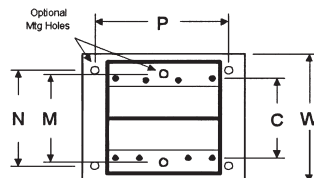
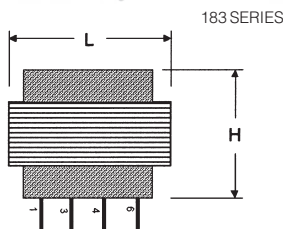
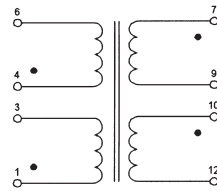
- Dual winding secondaries, low profile, split bobbin design
- Low primary to secondary coupling —no electrostatic shield required
- Universal dual primary 115/230V —either model 50/60 Hz operation
- High insulation —Hipot of 4,000V RMS
- P.C. board mount —standard pin spacing
- CSA certified (#LR3902) and UL recognized (#E50394)
- Class F insulation - 155 degrees C

DIMENSIONS (ALL DIMENSIONS IN INCHES)

(VA) Size	L	W	H	A	B	C	M	N	P	MTG. Screw	lbs.
2.5	1 1/8	1 7/8	1 1/8	.20	.25	1.00	1 1/8	—	—	#4	0.17
5.0	1 1/8	1 7/8	1 3/8	.20	.40	1.00	1 1/8	—	—	#4	0.37
10	1 1/8	1 7/8	1 3/8	.20	.40	1.14	1 1/4	—	—	#4	0.53
20	2 1/4	1 7/8	1 5/8	.40	.40	1.46	1 1/2	—	—	#4	0.90
30	2 5/8	2 3/8	1 9/8	.55	.28	1.68	—	1 3/4	2 3/8	#6	1.15
56	3	2 1/2	1 1/8	.60	.30	1.90	—	2	2 1/2	#6	1.70

DUAL PRIMARY 115/230V

Cat. No.	VA	Secondary (RMS)		Net Price
		Series	Parallel	
183E10	2.5	10V C.T. @ .25A	5V @ .5A	\$13.75
183F10	5.0	10V C.T. @ .5A	5V @ 1.0A	14.87
183G10	10.0	10V C.T. @ 1.0A	5V @ 2.0A	16.36
183H10	20.0	10V C.T. @ 2.0A	5V @ 4.0A	19.73
183J10	30.0	10V C.T. @ 3.0A	5V @ 6.0A	23.38
183K10	56.0	10V C.T. @ 5.6A	5V @ 11.2A	29.36
183E12	2.5	12.6V C.T. @ .2A	6.3V @ .4A	13.75
183F12	5.0	12.6V C.T. @ .4A	6.3V @ .8A	14.87
183G12	10.0	12.6V C.T. @ .8A	6.3V @ 1.6A	16.36
183H12	20.0	12.6V C.T. @ 1.6A	6.3V @ 3.2A	19.73
183J12	30.0	12.6V C.T. @ 2.4A	6.3V @ 4.8A	23.38
183K12	56.0	12.6V C.T. @ 4.4A	6.3V @ 8.8A	29.36
183E16	2.5	16V C.T. @ .15A	8V @ .3A	13.75
183F16	5.0	16V C.T. @ .31A	8V @ .62A	14.87
183G16	10.0	16V C.T. @ .62A	8V @ 1.25A	16.36
183H16	20.0	16V C.T. @ 1.25A	8V @ 2.5A	19.73
183J16	30.0	16V C.T. @ 1.9A	8V @ 3.8A	23.38
183K16	56.0	16V C.T. @ 3.5A	8V @ 7.0A	29.36
183E20	2.5	20V C.T. @ .12A	10V @ .24A	13.75
183F20	5.0	20V C.T. @ .25A	10V @ .5A	14.87
183G20	10.0	20V C.T. @ .5A	10V @ 1.0A	16.36
183H20	20.0	20V C.T. @ 1.0A	10V @ 2.0A	19.73
183J20	30.0	20V C.T. @ 1.5A	10V @ 3.0A	23.38
183K20	56.0	20V C.T. @ 2.8A	10V @ 5.6A	29.36
183E24	2.5	24V C.T. @ .1A	12V @ .2A	13.75
183F24	5.0	24V C.T. @ .21A	12V @ .42A	14.87
183G24	10.0	24V C.T. @ .42A	12V @ .84A	16.36
183H24	20.0	24V C.T. @ .83A	12V @ 1.66A	19.73
183J24	30.0	24V C.T. @ 1.25A	12V @ 2.5A	23.38
183K24	56.0	24V C.T. @ 2.33A	12V @ 4.66A	29.36
183E28	2.5	28V C.T. @ .09A	14V @ .18A	13.75
183F28	5.0	28V C.T. @ .18A	14V @ .36A	14.87
183G28	10.0	28V C.T. @ .36A	14V @ .72A	16.36
183H28	20.0	28V C.T. @ .72A	14V @ 1.44A	19.73
183J28	30.0	28V C.T. @ 1.06A	14V @ 2.12A	23.38
183K28	56.0	28V C.T. @ 2.0A	14V @ 4.0A	29.36
183E36	2.5	36V C.T. @ .07A	18V @ .14A	13.75
183F36	5.0	36V C.T. @ .14A	18V @ .28A	14.87
183G36	10.0	36V C.T. @ .28A	18V @ .56A	16.36
183H36	20.0	36V C.T. @ .56A	18V @ 1.12A	19.73
183J36	30.0	36V C.T. @ .82A	18V @ 1.64A	23.38
183K36	56.0	36V C.T. @ 1.56A	18V @ 3.12A	29.36



1-800-56-SONIC
www.e-sonic.com