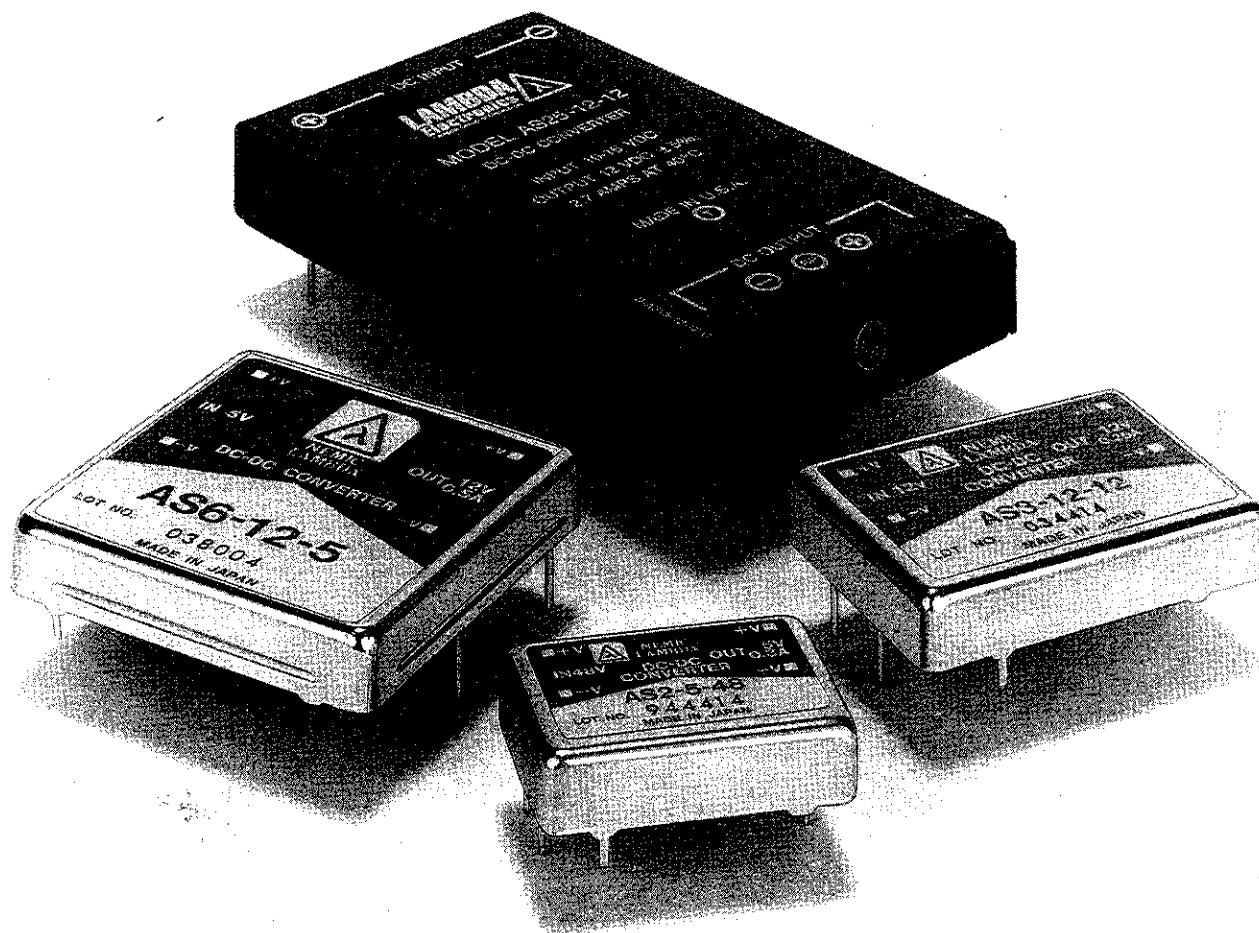


PART II—DC-TO-DC CONVERTERS

LAMBDA'S INDUSTRIAL A SERIES



DESIGNED FOR COMMUNICATIONS AND INDUSTRIAL CONTROL EQUIPMENT

Lambda's new A Series DC-to-DC Converters are convection cooled modules that are fully isolated for PC board applications. Their ultra-thin profiles, down to 0.35-inches, allows for mounting of multiple circuit cards in a high density orientation. And unlike most DC-to-DC converters, the A Series specifications are guaranteed over the entire operating temperature range.

The A Series has wide range DC input capability and provides fully regulated output voltages to the load...ideal for low voltage battery or 48VDC telecommunication applications. It is a prime choice when powering up transducers, A/D and D/A converters, power operational amplifiers, and memories, or for providing local regulation for other types of circuits.

- ☐ 105 new low profile models with power density up to 9.1W/in³, increasing circuit board density in your final product.
- ☐ All models are convection cooled. No heat sink is required for reliable operation.
- ☐ All models have an isolation rating of 500VDC input to output. The 48VDC input models of the AS25 feature an industry standard isolation rating of 1500VDC.
- ☐ Efficiencies up to 81% reduce overall heat rise for increased reliability.
- ☐ 40 new 6W and 10W dual models.
- ☐ Operation from -20°C to +71°C operation on low power converters (AS2, AS3) for wide range temperature requirements.
- ☐ Grade 1 design (AS25 is grade 2 design).

PART II—DC-TO-DC CONVERTERS

LAMBDA'S INDUSTRIAL A SERIES

DC OUTPUT

Voltage range shown in tables.

REGULATED VOLTAGE

regulation, line	0.4% for input variations over entire input range. 0.1% for AS25 Series.
regulation, load	0.6% for load variations from no load to full load and full load to no load with constant input. 0.4% for AS25 Series. 0.5% for 24V models of AS6 and AS10 Series.
ripple and noise (20MHz Bandwidth)	100mV pk-pk for 5V models of AS25 Series. 120mV pk-pk for 5V models of AS2, AS3, AS6, AS10 Series and AD Series. 150mV pk-pk for 12V and 15V models of AS2, AS3, AS6, AS10 and AS25 Series. 200mV pk-pk for 24V models of AS6 and AS10 Series.
temperature coefficient	0.03%/°C.

EFFICIENCY (TYPICAL)

Minimum for AS25 Series.
60% on 5V models of AS2 Series.
65% on 12V and 15V models of AS2 Series; 5V models of AS3 Series; -1205, -1505 and dual 5V models of AD6 Series; AD10-D505-5.
68% on 5V AD10 models (12, 24 and 48V inputs).
70% on 12V and 15V models of AS3 Series; 5V models of AS25 Series; AS6-5-5; dual 12V and 15V models of AD Series.
72% on 12V, 15V, and 24V models of AS6 Series (5V input); 5V models of AS6 Series (12V, 24V, and 48V inputs).
74% on 12V and 15V models of AS25 Series.
75% on 12V, 15V, and 24V models of AS6 Series (12V, 24V, and 48V inputs).
77% on 5V, 12V, 15V, and 24V models of AS10 Series (5V input).
79% on 5V, 12V, 15V, and 24V models of AS10 Series (12V inputs).
81% on 5V, 12V, 15V, and 24V models of AS10 Series (24V and 48V inputs).

OVERSHOOT

No overshoot at turn-on, turn-off, or power failure.

OPERATING TEMPERATURE RANGE

AS2, AS3 and AD6 Series: continuous duty -20°C to +71°C with suitable derating below -10°C and above 50°C.
AS6, AS10 and AD10 Series: continuous duty -20°C to +60°C with suitable derating above 50°C.
AS25 Series: -10°C to +65°C with suitable derating above 40°C.

STORAGE TEMPERATURE RANGE

-40°C to +85°C. -30°C to +85°C for AS25 Series.

OVERLOAD PROTECTION ELECTRICAL

External overload protection. Automatic electronic current limiting circuit limits the output current to a preset value, thereby providing protection for the load as well as the power supply. Should an overload condition on the AS6 or AS10 last for longer than 5 seconds, the unit will automatically shut down the output voltage. Avoid operating the AD Series in overload or short circuit for longer than 30 seconds.

COOLING

All units are convection cooled. No fans or blowers needed.

OUTPUT VOLTAGE ADJUST

Output voltage on AS25 Series can be set to desired value within the entire range by inserting a resistor between +V and RP terminals. Resistor can be selected as per values supplied in instruction manual.

SERIES OPERATION

AS2, AS3, AS6, AD6, AS10 and AD10 models are capable of series operation.

INPUT AND OUTPUT CONNECTIONS

DC input and outputs are via pin type connections.

MOUNTING

PC board mountable.

ISOLATION RATING

500VDC output to ground.
500VDC input to output for 12V input models of AS25 Series.
1500VDC input to output for 48V input models of AS25 Series.
1500VDC input to ground for AS25 Series.

PHYSICAL DATA

Package Model	Lbs. Net	Lbs. Ship	Size Inches
AS2	0.05	0.10	1.30 × 0.35 × 0.87
AS3	0.06	0.12	1.78 × 0.35 × 1.18
AS6, AD6	0.07	0.15	1.85 × 0.35 × 1.85
AS10	0.07	0.15	1.85 × 0.35 × 1.85
AD10	0.07	0.15	1.85 × 0.35 × 2.28
AS25	0.20	0.40	2.10 × 0.55 × 3.40

GUARANTEE

One year guarantee includes labor as well as parts.

INDUSTRIAL CONVERTER SELECTOR GUIDE

AS Series. 5VDC Input. Single Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE QTY. 25	QTY. 100	QTY. 250	MODEL
40°C	50°C	60°C	71°C										
5V ± 5% FIXED													
0.3	0.3	0.18	0.06	4.5-6	113	186	1.30 × 0.35 × 0.87	\$30	\$28	\$27	\$22	\$21	AS2-5-5
0.6	0.6	0.36	0.12	4.5-6	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-5-5
1.2	1.2	0.72	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-5-5
1.6	1.6	0.96	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-5-5
12V ± 5% FIXED													
0.125	0.125	0.075	0.025	4.5-6	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-12-5
0.25	0.25	0.15	0.05	4.5-6	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-12-5
0.50	0.50	0.30	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-12-5
0.70	0.70	0.42	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-12-5
15V ± 5% FIXED													
0.1	0.1	0.06	0.02	4.5-6	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-15-5
0.2	0.2	0.12	0.04	4.5-6	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-15-5
0.4	0.4	0.24	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-15-5
0.55	0.55	0.33	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-15-5
24V ± 5% FIXED													
0.25	0.25	0.15	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-24-5
0.35	0.35	0.21	—	4.5-7.2	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-24-5

AD Series. 5VDC Input. Dual Output. Convection Cooled. PC Mount.

V _O	MAX CURRENT AT OPERATING TEMPERATURE OF				MAX POWER IN WATTS				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE			QTY. 250	MODEL
	40°C	50°C	60°C	71°C	40°C	50°C	60°C	71°C							QTY. 25	QTY. 100			
5V, 5V ± 5% FIXED																			
5V	.60	.60	.36	.06	4.5	4.5	2.7	.45	4.5-7.2	113	185	1.85 × .35 × 1.85	\$58	\$55	\$52	\$41	\$40	AD6-0505-5	
5V	.60	.60	.36	.06	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-5	
5V	.80	.80	.48	—	8	8	4.8	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-5	
5V	.80	.80	.48	—	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-5	
12V, 12V ± 5% FIXED																			
12V	.25	.25	.15	.03	6	6	3.6	.6	4.5-7.2	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1212-5	
12V	.25	.25	.15	.03	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-5	
12V	.35	.35	.21	—	8.4	8.4	5.04	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-5	
12V	.35	.35	.21	—	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-5	
12V, 5V ± 5% FIXED																			
12V	.25	.25	.15	.03	4.5	4.5	2.7	.45	4.5-7.2	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1205-5	
5V	.60	.60	.36	.06	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-5	
12V	.35	.35	.21	—	8	8	4.8	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-5	
5V	.80	.80	.48	—	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-5	
15V, 15V ± 5% FIXED																			
15V	.20	.20	.12	.02	6	6	3.6	.6	4.5-7.2	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1515-5	
15V	.20	.20	.12	.02	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-5	
15V	.30	.30	.18	—	9	9	5.4	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-5	
15V	.30	.30	.18	—	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-5	
15V, 5V ± 5% FIXED																			
15V	.20	.20	.12	.02	4.5	4.5	2.7	.45	4.5-7.2	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1505-5	
5V	.60	.60	.36	.06	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-5	
15V	.30	.30	.18	—	8	8	4.8	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-5	
5V	.80	.80	.48	—	—	—	—	—	4.5-7.2	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-5	

PART II—DC-TO-DC CONVERTERS

INDUSTRIAL CONVERTER SELECTOR GUIDE

AS Series. 12VDC and 15VDC Input. Single Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE QTY. 25	QTY. 100	QTY. 250	MODEL
40°C	50°C	60°C	71°C										
5V ± 5% FIXED													
0.3	0.3	0.18	0.06	8-16.5	113	186	1.30 × 0.35 × 0.87	\$ 30	\$28	\$27	\$22	\$21	AS2-5-12
0.6	0.6	0.36	0.12	8-16.5	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-5-12
1.2	1.2	0.72	—	8-16.5	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-5-12
1.8	1.8	1.08	—	8-16.5	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-5-12
5.0	4.3	3.8	3.5	10-16	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-5-12
12V ± 5% FIXED													
0.125	0.125	0.075	0.025	8-16.5	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-12-12
0.25	0.25	0.15	0.05	8-16.5	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-12-12
0.50	0.50	0.30	—	8-16.5	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-12-12
0.75	0.75	0.45	—	8-16.5	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-12-12
2.70	2.40	2.00	1.8	10-16	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-12-12
15V ± 5% FIXED													
0.1	0.1	0.06	0.02	8-16.5	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-15-12
0.2	0.2	0.12	0.04	8-16.5	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-15-12
0.4	0.4	0.24	—	8-16.5	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-15-12
0.6	0.6	0.30	—	8-16.5	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-15-12
2.2	1.9	1.60	1.5	10-16	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-15-12
24V ± 5% FIXED													
0.25	0.25	0.15	—	8-16.5	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-24-12
0.38	0.38	0.23	—	8-16.5	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-24-12

AD Series. 12VDC Input. Dual Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				MAX POWER IN WATTS				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE			QTY. 100	QTY. 250	MODEL
V _O	40°C	50°C	60°C	71°C	40°C	50°C	60°C							71°C	QTY. 25				
5V, 5V ± 5% FIXED																			
5V	.60	.60	.36	.06	4.5	4.5	2.7	.45	8.0-16.5	113	185	1.85 × .35 × 1.85	\$58	\$55	\$52	\$41	\$40	AD6-0505-12	
5V	.60	.60	.36	.06	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-12	
5V	1.00	1.00	.60	—	8	8	4.8	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-12	
5V	1.00	1.00	.60	—	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-12	
12V, 12V ± 5% FIXED																			
12V	.25	.25	.15	.03	6	6	3.6	.6	8.0-16.5	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1212-12	
12V	.25	.25	.15	.03	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-12	
12V	.45	.45	.27	—	10.8	10.8	6.48	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-12	
12V	.45	.45	.27	—	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-12	
12V, 5V ± 5% FIXED																			
12V	.25	.25	.15	.03	4.5	4.5	2.7	.45	8.0-16.5	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1205-12	
5V	.60	.60	.36	.06	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-12	
12V	.45	.45	.27	—	8	8	4.8	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-12	
5V	1.00	1.00	.60	—	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-12	
15V, 15V ± 5% FIXED																			
15V	.20	.20	.12	.02	6	6	3.6	.6	8.0-16.5	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1515-12	
15V	.20	.20	.12	.02	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-12	
15V	.35	.35	.21	—	10.5	10.5	6.3	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-12	
15V	.35	.35	.21	—	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-12	
15V, 5V ± 5% FIXED																			
15V	.20	.20	.12	.02	4.5	4.5	2.7	.45	8.0-16.5	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1505-12	
5V	.60	.60	.36	.06	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-12	
15V	.35	.35	.21	—	8	8	4.8	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-12	
5V	1.00	1.00	.60	—	—	—	—	—	8.0-16.5	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-12	

AS Series. 24VDC and 28VDC Input. Single Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE QTY. 25	QTY. 100	QTY. 250	MODEL
40°C	50°C	60°C	71°C										
5V ± 5% FIXED													
0.3	0.3	0.18	0.06	18-32	113	186	1.30 × 0.35 × 0.87	\$ 30	\$28	\$27	\$22	\$21	AS2-5-24
0.6	0.6	0.36	0.12	18-32	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-5-24
1.2	1.2	0.72	—	18-32	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-5-24
2.0	2.0	1.20	—	18-32	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-5-24
5.0	4.4	3.90	—	18-36	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-5-24
12V ± 5% FIXED													
0.125	0.125	0.075	0.025	18-32	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-12-24
0.25	0.25	0.15	0.05	18-32	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-12-24
0.50	0.50	0.30	—	18-32	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-12-24
0.90	0.90	0.54	—	18-32	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-12-24
2.70	2.40	2.20	—	18-36	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-12-24

PART II — DC-TO-DC CONVERTERS

INDUSTRIAL CONVERTER SELECTOR GUIDE

AS Series. 24VDC and 28VDC Input. Single Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE QTY. 25	QTY. 100	QTY. 250	MODEL
40°C	50°C	60°C	71°C										
15V ± 5% FIXED													
0.1	0.1	0.06	0.02	18-32	113	186	1.30 × 0.35 × 0.87	\$ 30	\$28	\$27	\$22	\$21	AS2-15-24
0.2	0.2	0.12	0.04	18-32	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-15-24
0.4	0.4	0.24	—	18-32	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-15-24
0.7	0.7	0.42	—	18-32	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-15-24
2.2	2.1	1.90	—	18-36	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-15-24
24V ± 5% FIXED													
0.25	0.25	0.15	—	18-32	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-24-24
0.45	0.45	0.27	—	18-32	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-24-24

AD Series. 24VDC Input. Dual Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				MAX POWER IN WATTS				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE		QTY. 250	MODEL	
V _o	40°C	50°C	60°C	71°C	40°C	50°C	60°C							71°C	QTY. 25			QTY. 100
5V, 5V ± 5% FIXED																		
5V	.60	.60	.36	.06	4.5	4.5	2.7	.45	16-32	113	185	1.85 × .35 × 1.85	\$58	\$55	\$52	\$41	\$40	AD6-0505-24
5V	.60	.60	.36	.06	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-24
5V	1.00	1.00	.60	—	8	8	4.8	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-24
5V	1.00	1.00	.60	—	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-24
12V, 12V ± 5% FIXED																		
12V	.25	.25	.15	.03	6	6	3.6	.6	16-32	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1212-24
12V	.25	.25	.15	.03	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-24
12V	.45	.45	.27	—	10.8	10.8	6.48	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-24
12V	.45	.45	.27	—	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-24
12V, 5V ± 5% FIXED																		
12V	.25	.25	.15	.03	4.5	4.5	2.7	.45	16-32	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1205-24
5V	.60	.60	.36	.06	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-24
12V	.45	.45	.27	—	8	8	4.8	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-24
5V	1.00	1.00	.60	—	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-24
15V, 15V ± 5% FIXED																		
15V	.20	.20	.12	.02	6	6	3.6	.6	16-32	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1515-24
15V	.20	.20	.12	.02	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-24
15V	.35	.35	.21	—	10.5	10.5	6.3	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-24
15V	.35	.35	.21	—	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-24
15V, 5V ± 5% FIXED																		
15V	.20	.20	.12	.02	4.5	4.5	2.7	.45	16-32	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1505-24
5V	.60	.60	.36	.06	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-24
15V	.35	.35	.21	—	8	8	4.8	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-24
5V	1.00	1.00	.60	—	—	—	—	—	16-32	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-24

AS Series. 48VDC Input. Single Output. Convection Cooled. PC Mount.

MAX CURRENT AT OPERATING TEMPERATURE OF				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE		QTY. 250	MODEL
40°C	50°C	60°C	71°C							QTY. 25	QTY. 100		
5V ± 5% FIXED													
0.3	0.3	0.18	0.06	32-60	113	186	1.30 × 0.35 × 0.87	\$ 30	\$28	\$27	\$22	\$21	AS2-5-48
0.6	0.6	0.36	0.12	32-60	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-5-48
1.2	1.2	0.72	—	32-60	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-5-48
2.0	2.0	1.20	—	32-60	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-5-48
5.0	4.8	4.3	4.0	36-72	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-5-48
12V ± 5% FIXED													
0.125	0.125	0.075	0.025	32-60	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-12-48
0.25	0.25	0.15	0.05	32-60	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-12-48
0.50	0.50	0.30	—	32-60	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-12-48
0.90	0.90	0.54	—	32-60	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-12-48
2.7	2.6	2.3	2.1	36-72	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-12-48
15V ± 5% FIXED													
0.1	0.1	0.06	0.02	32-60	113	186	1.30 × 0.35 × 0.87	30	28	27	22	21	AS2-15-48
0.2	0.2	0.12	0.04	32-60	113	186	1.78 × 0.35 × 1.18	36	34	32	26	25	AS3-15-48
0.4	0.4	0.24	—	32-60	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-15-48
0.7	0.7	0.42	—	32-60	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-15-48
2.2	2.1	1.9	1.8	36-72	113	186	2.10 × 0.55 × 3.40	100	95	90	72	68	AS25-15-48
24V ± 5% FIXED													
0.25	0.25	0.15	—	32-60	113	186	1.85 × 0.35 × 1.85	52	49	47	37	36	AS6-24-48
0.45	0.45	0.27	—	32-60	113	186	1.85 × 0.35 × 1.85	65	62	59	47	45	AS10-24-48

PART II—DC-TO-DC CONVERTERS

INDUSTRIAL CONVERTER SELECTOR GUIDE

AD Series. 48VDC Input. Dual Output. Convection Cooled. PC Mount.

V _O	MAX CURRENT AT OPERATING TEMPERATURE OF				MAX POWER IN WATTS				INPUT VOLTAGE RANGE (VDC)	COMPLETE ELEC. SPEC. PG.	COMPLETE MECH. SPEC. PG.	DIMENSIONS (inches)	QTY. 1	QTY. 10	PRICE			QTY. 250	MODEL
	40°C	50°C	60°C	71°C	40°C	50°C	60°C	71°C							QTY. 25	QTY. 100			
5V, 5V ± 5% FIXED																			
5V	.60	.60	.36	.06	4.5	4.5	2.7	.45	32-63	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-0505-48	
5V	.60	.60	.36	.06															
5V	1.00	1.00	.60	—	8	8	4.8	—	32-63	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-0505-48	
5V	1.00	1.00	.60	—															
12V, 12V ± 5% FIXED																			
12V	.25	.25	.15	.03	6	6	3.6	.6	32-63	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1212-48	
12V	.25	.25	.15	.03															
12V	.45	.45	.27	—	10.8	10.8	6.48	—	32-63	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1212-48	
12V	.45	.45	.27	—															
12V, 5V ± 5% FIXED																			
12V	.25	.25	.15	.03	4.5	4.5	2.7	.45	32-63	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1205-48	
5V	.60	.60	.36	.06															
12V	.45	.45	.27	—	8	8	4.8	—	32-63	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1205-48	
5V	1.00	1.00	.60	—															
15V, 15V ± 5% FIXED																			
15V	.20	.20	.12	.02	6	6	3.6	.6	32-63	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1515-48	
15V	.20	.20	.12	.02															
15V	.35	.35	.21	—	10.5	10.5	6.3	—	32-63	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1515-48	
15V	.35	.35	.21	—															
15V, 5V ± 5% FIXED																			
15V	.20	.20	.12	.02	4.5	4.5	2.7	.45	32-63	113	185	1.85 × .35 × 1.85	58	55	52	41	40	AD6-1505-48	
5V	.60	.60	.36	.06															
15V	.35	.35	.21	—	8	8	4.8	—	32-63	113	185	1.85 × .35 × 2.28	75	72	68	54	53	AD10-1505-48	
5V	1.00	1.00	.60	—															

NOTES: 1. Current range must be chosen to suit the appropriate maximum baseplate temperature. Current ratings apply for the entire voltage range.
 2. An external, user-supplied voltage adjust pot is required for continuous voltage over this range. The output voltage is factory set to be V_o nominal ± 3%.
 3. Contact factory for detailed application notes.

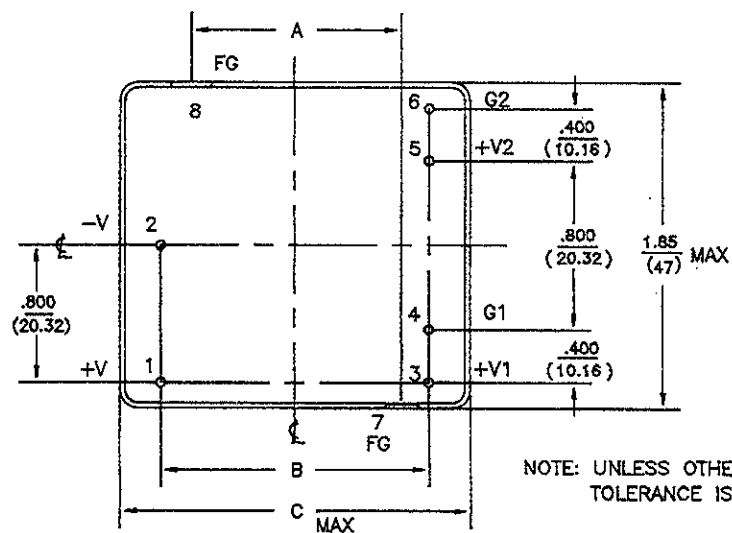
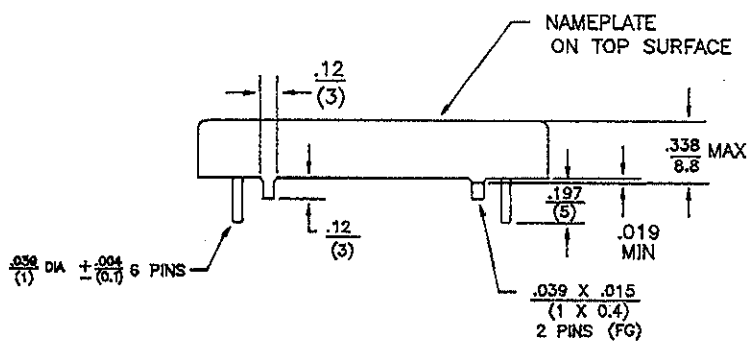
PART V—MECHANICAL DRAWINGS

LW SERIES AND AD SERIES

AD-6
AD-10

DIMENSIONS ARE IN
INCHES OVER MILLIMETERS.

DIM MODEL	A	B	C
AD6	$\frac{1.30}{33.02}$	$\frac{1.600}{40.64}$	$\frac{1.85}{47}$
AD10	$\frac{1.50}{38.10}$	$\frac{2.000}{50.80}$	$\frac{2.28}{58}$

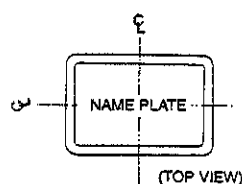


NOTE: UNLESS OTHERWISE SPECIFIED,
TOLERANCE IS $\pm \frac{.012}{(0.3)}$ INCHES
MM

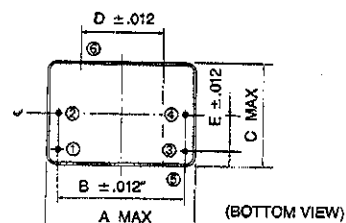
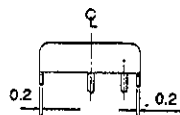
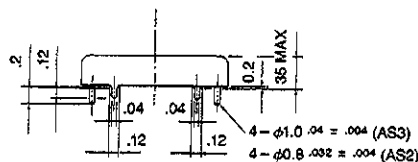
BOTTOM VIEW

UHD SERIES AND LAS SERIES

AS2
AS3

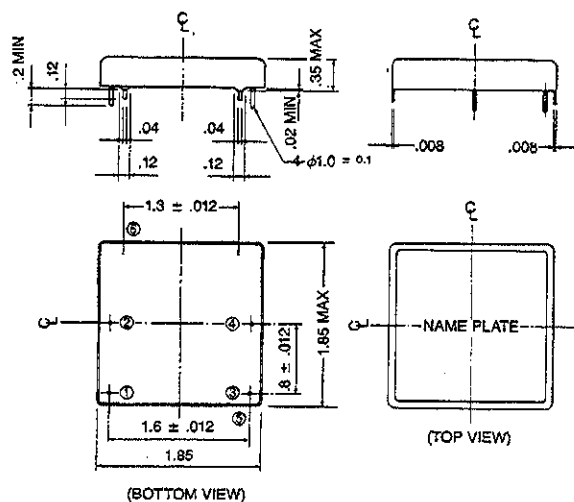


PIN	DESIGNATION
1	POSITIVE INPUT
2	NEGATIVE INPUT
3	POSITIVE OUTPUT
4	NEGATIVE OUTPUT
5	CASE GROUND
6	CASE GROUND



	DIMENSIONS (MM)				
MODEL	A	B	C	D	E
AS 2	1.3	1.1	.87	.8	.3
AS 3	1.77	1.5	1.18	1.0	.4

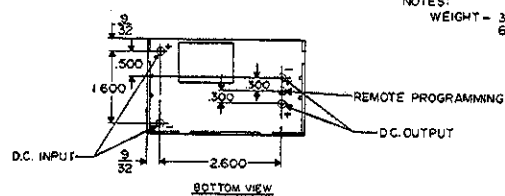
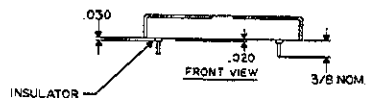
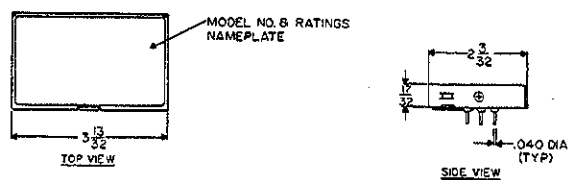
AS6
AS10



PIN	DESIGNATION
1	POSITIVE INPUT
2	NEGATIVE INPUT
3	POSITIVE OUTPUT
4	NEGATIVE OUTPUT
5	CASE GROUND
6	CASE GROUND

DIMENSIONS: INCHES

AS25



NOTES:
WEIGHT - 3 OZ. NET
6 OZ. SHIPPING