

T-57-11

SERIES JR

Isolated Regulated 15 Watt DC-DC Converters

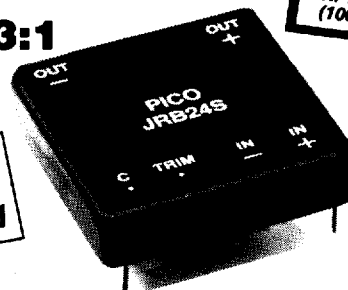
Wide Input Range/up to 3.33:1

Fully Regulated

All Units Shielded

**New 100 VDC
Output Models**

**No Heat Sink
or Electrical
Derating Required**



OPTIONS AVAILABLE

- Expanded operating temp (-55°C to +85°C)
- Stabilization Bake (125°C ambient)
- Temperature Cycle (-55°C to +125°C)
- Hi Temp, full power burn in (100% power, 125°C case temp)

**Low Profile
Less Than
0.5" Height**

SERIES JR - SINGLE OUTPUT

FEATURES:

- Voltage regulation over input of

	LOW	HI
JRA	18V	36V
JRB	36V	60V
JRC	18V	60V
- Encapsulated semi-conductors, conservatively rated for maximum reliability.
- Load regulation (see table for typical variation at different loads)
- Line regulation =

Typical values
18-36V DC = $\pm 1.0\%$
36-60V DC = $\pm 1.0\%$
18-60V DC = $\pm 2.0\%$
- High efficiency—up to 84%
- Will operate over a temperature range of -25°C to +70°C with no heat sink or electrical derating
- 6 sided shielding
- Isolation—100 megohms at 500 Volts DC
- External output trimming pin standard, +5%
- Single and dual isolated outputs
- Each unit is supplied with an external control pin. This "C" pin, when connected to the negative (-) input, will disable the unit, allowing for remote shutdown.

PICO PART NUMBER	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE DC	MAX. LOAD CURRENT mA	MAX. OUTPUT POWER (watts)	EFF. @ FULL LOAD TYPICAL (%)	INPUT CURRENT FULL LOAD TYPICAL (mA)	OUT VOLT RIPPLE @ FULL LD. 1-1 MHz BW mv p-p	OUT VOLT TOLERANCE (±%)	VLD. REG. 25%-100% LOAD (±%)	LINE REGULATION (±%)	PRICE 1-24
JRA5S	18-36	5	3000	15	78	710	50	0.75	2.00	1.50	154.08
JRA9S	18-36	9	1667	15	78	710	40	0.50	1.50	0.50	154.08
JRA12S	18-36	12	1250	15	78	710	40	0.50	1.00	0.50	154.08
JRA15S	18-36	15	1000	15	78	710	40	0.50	1.00	0.50	154.08
JRA24S	18-36	24	625	15	83	670	40	0.50	1.00	0.25	154.08
JRA28S	18-36	28	536	15	84	660	40	0.75	0.50	0.25	154.08
JRA48S	18-36	48	313	15	84	660	50	0.75	0.50	0.25	154.08
JRA100S	18-36	100	150	15	84	660	75	0.50	0.75	0.25	192.60
JRB5S	36-60	5	3000	15	78	400	50	0.75	2.00	0.75	179.76
JRB9S	36-60	9	1667	15	78	400	40	0.50	1.50	0.50	179.76
JRB12S	36-60	12	1250	15	80	390	40	0.50	1.00	0.50	179.76
JRB15S	36-60	15	1000	15	81	385	40	0.50	1.00	0.50	179.76
JRB24S	36-60	24	625	15	83	375	40	0.50	1.00	0.25	179.76
JRB28S	36-60	28	536	15	84	370	40	0.50	0.50	0.25	179.76
JRB48S	36-60	48	313	15	84	370	50	0.50	0.50	0.25	179.76
JRB100S	36-60	100	150	15	84	370	75	0.50	0.50	0.25	224.70
JRC5S	18-60	5	3000	15	78	495	50	0.75	2.00	1.50	192.60
JRC9S	18-60	9	1667	15	78	495	40	0.50	1.50	0.75	192.60
JRC12S	18-60	12	1250	15	80	480	40	0.50	1.00	0.75	192.60
JRC15S	18-60	15	1000	15	81	475	40	0.50	1.00	0.75	192.60
JRC24S	18-60	24	625	15	83	465	40	0.50	1.00	0.50	192.60
JRC28S	18-60	28	536	15	84	460	40	0.50	0.50	0.50	192.60
JRC48S	18-60	48	313	15	84	460	50	0.50	0.50	0.50	192.60
JRC100S	18-60	100	150	15	84	460	75	0.50	0.50	0.50	240.75

*Measurements taken with input voltage set at mid value.

Ordering Instructions: No minimum. Net 30 days F.O.B. Mt. Vernon, New York.

‡ 10% minimum load required.

For immediate engineering assistance
or to place an order—

Call Toll Free 800-431-1064

PICO

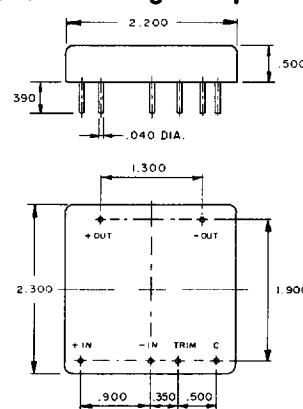
Electronics, Inc.

453 N. MacQuesten Pkwy.
Mt. Vernon, N.Y. 10552

914-699-5514 • FAX 914-699-5565

**Delivery—
stock to one week**

Series JR - Single Output

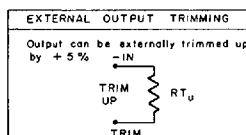
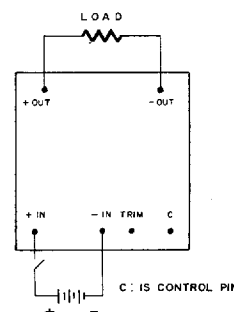


C: IS CONTROL PIN

NOTE: ALL RADII TO BE 7/64"

BOTTOM VIEW

Typical Weight: 115 Grams



Each unit is supplied with an external control pin. This "C" pin, when connected to the negative (-) input, will disable the unit, allowing for remote shutdown.

This series of high efficiency, wide input range, encapsulated regulators come in 45 different models. These units feature a 500 Volt DC input to output isolation in both single and dual output models. The JR Series will operate over a temperature range of -25°C to $+70^{\circ}\text{C}$ with no heat sink or electrical derating. These units are excellent for applications where input voltage varies dramatically, yet a high efficiency and output voltage regulation must be maintained.

- OPTIONS AVAILABLE**
- Expanded operating temp (-55°C to $+85^{\circ}\text{C}$)
 - Stabilization Bake (125°C ambient)
 - Temperature Cycle (-55°C to $+125^{\circ}\text{C}$)
 - Hi Temp, full power burn in (100% power, 125°C case temp)

**No Heat Sink
or Electrical
Derating Required**

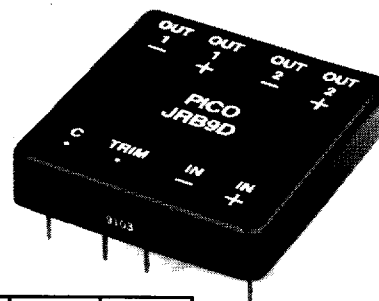
TYPICAL CHARACTERISTICS:

Test conditions: 25°C ambientOperating temperature: -25°C to $+70^{\circ}\text{C}$ ambientOutput voltage tolerance: $\pm 2\%$ at typical input voltageOutput voltage temperature coefficient: $0.02\%/^{\circ}\text{C}$ Storage temperature: -55°C to $+125^{\circ}\text{C}$

Short circuit protection: Temporary

Operating frequency: 40 KHz, typ.

T-57-11



SERIES JR - DUAL OUTPUT

PICO PART NUMBER	INPUT VOLTAGE RANGE	OUTPUT VOLTAGE DC PER OUTPUT	MAX. LOAD CURRENT mA PER OUTPUT	MAX. OUTPUT POWER (watts) PER OUTPUT	EFF. @ FULL LOAD TYPICAL (%)	INPUT CURRENT FULL LOAD TYPICAL (mA)	OUT VOLT RIPPLE @ FULL LD. 1-1 MHz BW mv p-p	OUT VOLT TOLERANCE ($\pm\%$)	V.L.D. REG. 25%-100% LOAD ($\pm\%$)	LINE REGULATION ($\pm\%$)	PRICE 1-24
JRA5D	18-36	5	1500	7.5	78	710	50	0.75	2.00	1.50	180.83
JRA9D	18-36	9	833	7.5	78	710	40	0.50	1.50	0.50	180.83
JRA12D	18-36	12	625	7.5	78	710	40	0.50	1.00	0.50	180.83
JRA15D	18-36	15	500	7.5	78	710	40	0.50	1.00	0.50	180.83
JRA24D	18-36	24	313	7.5	83	670	40	0.50	1.00	0.25	180.83
JRA28D	18-36	28	268	7.5	84	660	40	0.75	0.75	0.25	180.83
JRA48D	18-36	48	156	7.5	84	660	50	0.75	0.75	0.25	180.83
JRB5D	36-60	5	1500	7.5	78	400	50	0.75	2.00	0.75	206.51
JRB9D	36-60	9	833	7.5	78	400	40	0.50	1.50	0.50	206.51
JRB12D	36-60	12	625	7.5	80	390	40	0.50	1.00	0.50	206.51
JRB15D	36-60	15	500	7.5	81	385	40	0.50	1.00	0.50	206.51
JRB24D	36-60	24	313	7.5	83	375	40	0.50	1.00	0.25	206.51
JRB28D	36-60	28	268	7.5	84	370	40	0.50	0.50	0.25	206.51
JRB48D	36-60	48	156	7.5	84	370	50	0.50	0.50	0.25	206.51
JRC5D	18-60	5	1500	7.5	78	495	50	0.75	2.00	1.50	219.35
JRC9D	18-60	9	833	7.5	78	495	40	0.50	1.50	0.75	219.35
JRC12D	18-60	12	625	7.5	80	480	40	0.50	1.00	0.75	219.35
JRC15D	18-60	15	500	7.5	81	475	40	0.50	1.00	0.75	219.35
JRC24D	18-60	24	313	7.5	83	465	40	0.50	1.00	0.50	219.35
JRC28D	18-60	28	268	7.5	84	460	40	0.50	0.50	0.50	219.35
JRC48D	18-60	48	156	7.5	84	460	50	0.50	0.50	0.50	219.35

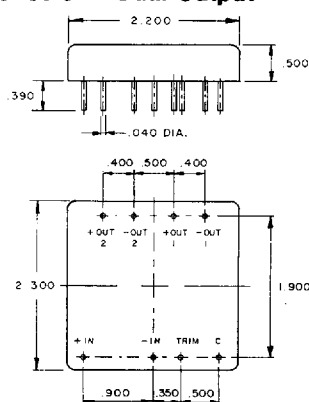
**Low Profile
Less Than
0.5" Height**

*Measurements taken with input voltage set at mid value.

‡ 10% minimum load required.

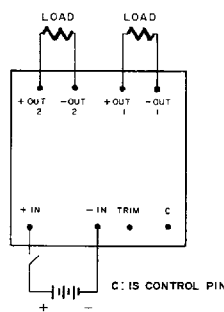
Ordering Instructions: No minimum. Net 30 days F.O.B. Mt. Vernon, New York.

Series JR - Dual Output



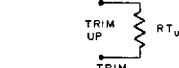
C: IS CONTROL PIN
NOTE: ALL RADII TO BE 7/64"
BOTTOM VIEW

Typical Weight: 115 Grams



EXTERNAL OUTPUT TRIMMING

Output can be externally trimmed up by + 5 %



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