

### FEATURES

- Basic Isolation
- RoHS Compliant
- Typical Efficiency: 81%
- Single and Dual Outputs
- 2:1 Wide Input Voltage Range
- **Economy Version of JR Series**
- No Minimum Load Requirement
- Remote Control (48V Models Only)
- Trim Function (Single Outputs Only)
- Industry Standard Footprint: 2" x 1" x 0.4"
- Approved to IEC/EN60950, UL60950 Safety Standards
- Over Current & Short Circuit Protection (48V Single Output Models Only)



### SPECIFICATIONS: *EJR Series*

*All specifications apply @ ±25°C ambient unless otherwise noted*



#### INPUT SPECIFICATIONS

Input Voltage Range ..... 12V nominal input..... 9 - 18VDC  
24V nominal input..... 18 - 38VDC  
48V nominal input..... 36 - 75VDC

Remote Control (**for 48V input models only**)  
(Positive Logic) ..... High = on ..... 3.5 to 10VDC  
Low = off ..... -0.7 to 0.8VDC  
(Negative Logic) ..... Low = on ..... -0.7 to 0.8VDC  
High = off ..... 3.5 to 10VDC

Remote Control Current..... 2mA max. (positive logic)  
4mA max. (negative logic)

#### OUTPUT SPECIFICATIONS

Output Current ..... see table  
Output Voltage ..... see table  
Voltage Adjustability (single outputs only)..... 90% to 110%  $V_o$   
Voltage Setpoint Accuracy..... ±1.0%  $V_o$  max.  
Line Regulation ..... ±0.2%  $V_o$  max.  
Load Regulation..... 0.5%  $V_o$  max.  
Maximum Power ..... 10W  
Ripple/Noise ..... < 50mVp-p max. (12V & 24V inputs)  
< 50mVp-p max. (48V input, dual output)  
< 100mVp-p max. (48V input, single output)  
Transient Response..... 200mV max.  
Recovery < 200µs max.  
(25% load step change from 50%  $I_o$ )  
di/dt: 1A/10µs

#### PROTECTION (3.3V & 5V single output, 48V input models)

Over Current Protection (3.3V, 5V)..... > 120%  $I_o$ , auto-recovery  
Short Circuit Protection (3.3V, 5V)..... Continuous, auto-recovery

#### GENERAL SPECIFICATIONS

Efficiency ..... see table

#### ENVIRONMENTAL SPECIFICATIONS

Operating Temperature ..... -40°C to +55°C (ambient)  
Storage Temperature ..... -55°C to +125°C  
Operating Case Temperature ..... -40°C to +100°C  
Temperature Coefficient ..... < ±0.02%/°C  
MTBF ..... > 2,000,000 hours

#### PHYSICAL SPECIFICATIONS

Dimensions..... 50.80(L) x 25.40(W) x 10.16(H) mm  
2.0(L) x 1.0(W) x 0.4(H) inches  
Weight ..... 23.3g

#### SAFETY

Safety Standards ..... IEC/EN60950, UL60950

*Due to advances in technology, specifications subject to change without notice*



Wall Industries, Inc.

Rev F

EJR Series  
Single & Dual Outputs  
10 Watt DC/DC Converter  
2:1 Wide Input Voltage Range  
"Economy" Version of JR Series

OUTPUT VOLTAGE / CURRENT RATING CHARTS

SINGLE OUTPUT MODELS

Table with 6 columns: Model, Input Voltage, Output Voltage, Output Current, Efficiency, Technical Datasheet. Rows include models like EJR12S3.3-3000, EJR24S3.3-3000, and EJR48S3.3-3000.

DUAL OUTPUT MODELS

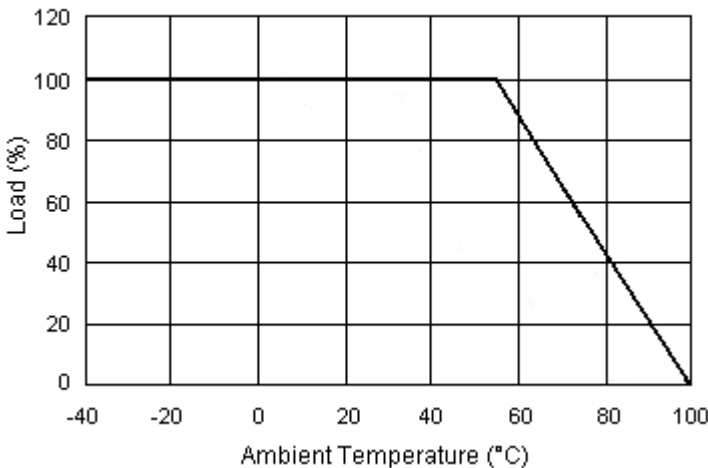
Table with 5 columns: Model, Input Voltage, Output Voltage, Output Current, Efficiency. Rows include models like EJR12D5-1000, EJR24D5-1000, and EJR48D5-1000.

NOTES

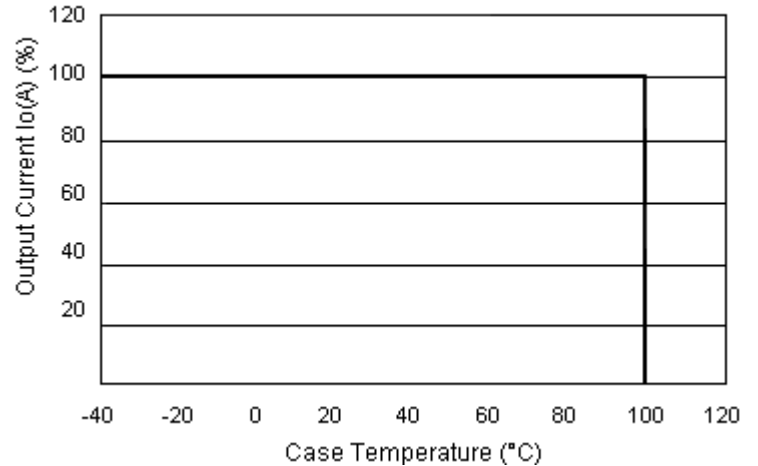
- 1. To order models with Trim function add the suffix "-T" to the part number. This option is only available for single output models.
2. Remote Control is only available for 48V nominal input models.
3. For 48V nominal input models without the Remote ON/OFF pin add the suffix "-1" to the end of the part number.
4. Over Current and Short Circuit Protection are only available for the 3.3V single output and the 5V single output, 48V nominal input models.

DERATING CURVES

EJR24S5-2000 & EJ48S5-2000 DERATING CURVE

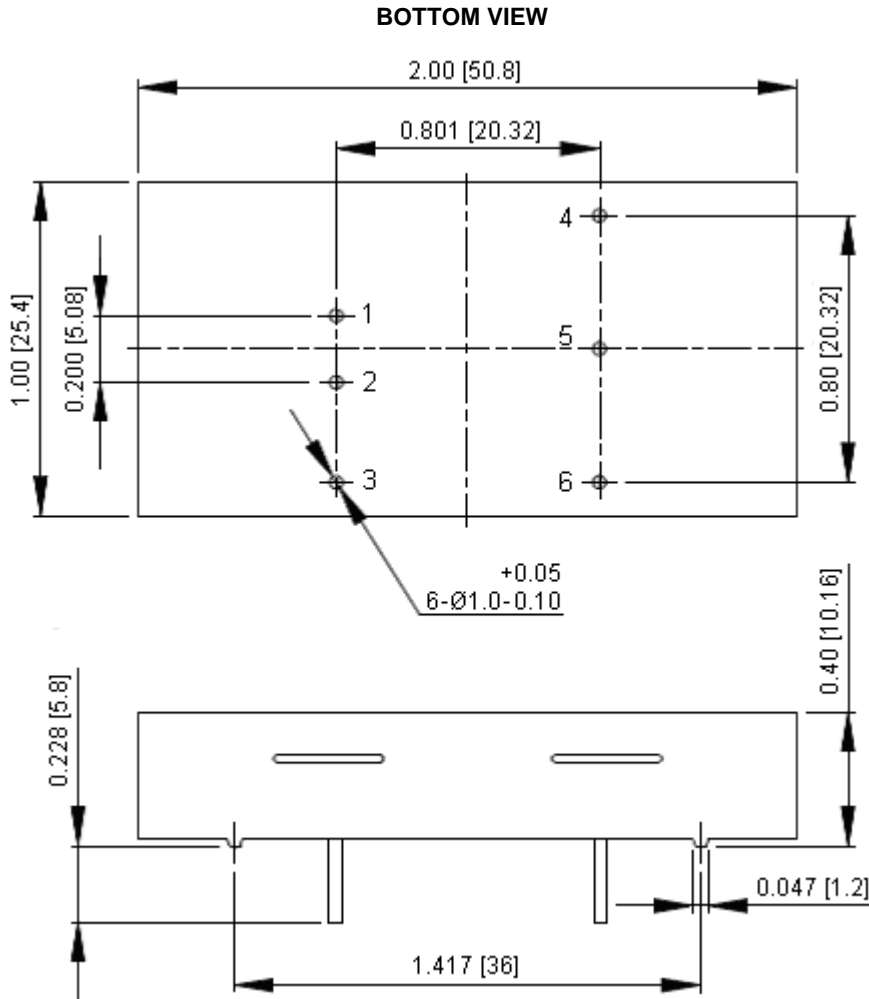


EJR24S5-2000 & EJ48S5-2000 DERATING CURVE



### MECHANICAL DRAWING

Unit: inches [mm]



Tolerance: X.Xmm = ±0.5mm  
X.XXmm = ±0.25mm

Pin Length: 5.8mm

PIN CONNECTIONS (12V & 24V INPUT MODELS)		
PIN #	SINGLE OUTPUT	DUAL OUTPUT
1	+Vin	+Vin
2	-Vin	-Vin
3	No Pin	No Pin
4	+Vo	+Vo
5	No Pin (Trim-optional)	COM
6	-Vo	-Vo

PIN CONNECTIONS (48V INPUT MODELS)		
PIN #	SINGLE OUTPUT	DUAL OUTPUT
1	+Vin	+Vin
2	-Vin	-Vin
3	Remote ON/OFF	Remote ON/OFF
4	+Vo	+Vo
5	No Pin (Trim-optional)	COM
6	-Vo	-Vo

PIN CONNECTIONS WITHOUT REMOTE ON/OFF PIN (48V INPUT MODELS)		
PIN #	SINGLE OUTPUT	DUAL OUTPUT
1	+Vin	+Vin
2	-Vin	-Vin
3	No Pin	No Pin
4	+Vo	+Vo
5	No Pin (Trim-optional)	Common
6	-Vo	-Vo