

# 6B

## 7.2 TO 20 WATT DC-DC CONVERTERS SINGLE OUTPUT

### **Features:**

- 20W Non-isolated output
- Efficiency to 88%
- Constant Frequency
- Regulated Outputs
- Over Current Protection
- Under Input Voltage Protection
- Output Voltage Adjustment
- Remote On/Off Control

| MODEL NUMBER | INPUT VOLTAGE | OUTPUT VOLTAGE | OUTPUT CURRENT MIN. | INPUT CURRENT |           | % EFF. | CASE |
|--------------|---------------|----------------|---------------------|---------------|-----------|--------|------|
|              |               |                |                     | NO LOAD       | FULL LOAD |        |      |
| 6B-05S12     | 4.5-5.5 VDC   | 1.2 VDC        | 6A                  | 40 mA         | 2000 mA   | 72     | B    |
| 6B-05S21     | 4.5-5.5 VDC   | 2.1 VDC        | 6A                  | 40 mA         | 3074 mA   | 82     | B    |
| 6B-05S25     | 4.5-5.5 VDC   | 2.5 VDC        | 6A                  | 40 mA         | 3572 mA   | 84     | B    |
| 6B-05S33     | 4.5-5.5 VDC   | 3.3 VDC        | 6A                  | 40 mA         | 4500 mA   | 88     | B    |

NOTE: 1. Nominal Input Voltage 5 VDC



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# Specifications

# 6B SERIES

## INPUT SPECIFICATIONS:

Input Voltage Range.....5V.....4.5-5.5V  
 Input Filter Type<sup>1</sup>.....Capacitive  
 Remote Shutdown<sup>2</sup>.....Positive Logic

## OUTPUT SPECIFICATIONS:

Voltage Accuracy .....± 1%max.  
 External Trim Adj. Range.....±10%  
 Ripple and Noise, 20MHz BW<sup>3</sup>.....75mV pk-pk max.  
 Temperature Coefficient .....±0.05%/°C  
 Over Current Protection.....Auto Recovery  
 Current Limit.....120% - 150% Nominal Output  
 Line Regulation<sup>4</sup> Single/Dual Output.....±0.5% max.  
 Load Regulation<sup>5</sup> Single/Dual Output.....±0.5% max.

## GENERAL SPECIFICATIONS:

Efficiency.....See Table  
 Switching Frequency.....200kHz, Typ.  
 Operating Temperature Range.....-25°C to + 71°C  
 Storage Temperature Range.....-40°C to + 105°C  
 Dimensions.....2.0 x 1.0 x 0.4 inches  
 (50.8 x 25.4 x 10.2 mm)  
 Case Material.....Non-Conductive Black Plastic

## NOTE:

1. Specification apply to model and require an 470µF input capacitor.

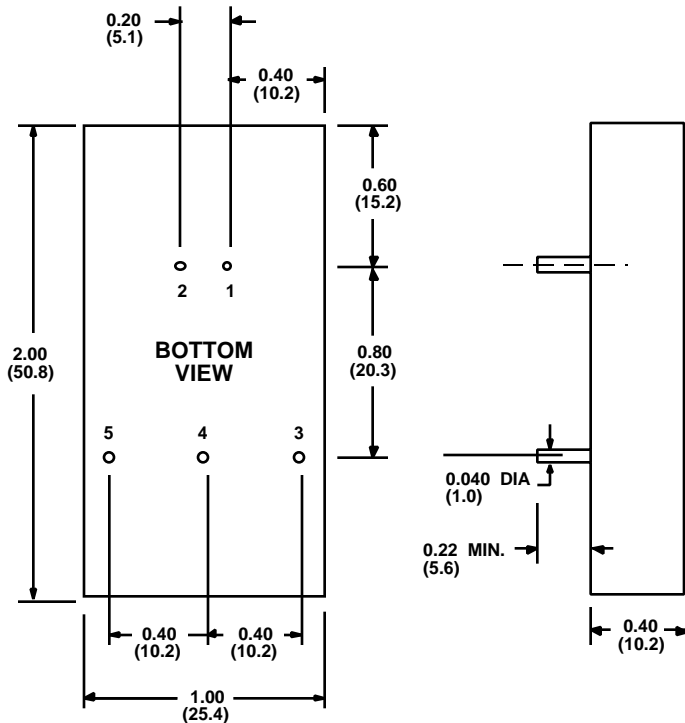
3. Measured From Output connect with an external capacitor 0.1µF ceramic.

4. Measured From High Line to Low Line

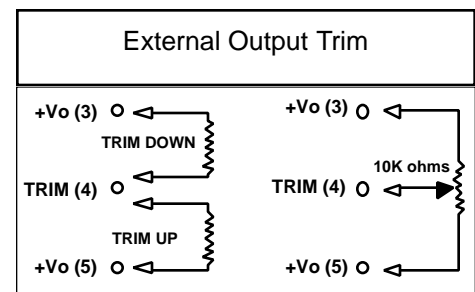
5. Measured From Full Load to 10% Load

## CASE B

NOTE: Pin Size is 0.02" Inch (0.5m/m) DIA or .020 x .014 inch  
 All Dimensions in Inches (mm)



| PIN CONNECTION |               |
|----------------|---------------|
| Pin            | Function      |
| 1.             | +Input        |
| 2.             | -Input        |
| 3.             | +Output       |
| 4.             | Trim          |
| 5.             | -Output       |
| 6.             | Remote ON/OFF |



All Specifications Typical At Nominal Line, Full Load and 25°C Unless Otherwise Noted.