

## AV075B Wide Input

75 Watt Eighth Brick DC-DC Converter

### Data Sheet

**Total Power:** 66 Watts  
(3V3 @ 20 A)  
**Input Voltage:** 18 - 75 Vdc  
**# of Outputs:** Single  
(3V3 nom)



### SPECIAL FEATURES

- 5 W continuous power
- High efficiency: 89.5%
- 18-75 Vdc wide range Telecom input range
- Baseplate optimised for contact cooling or heatsink mounting
- Open frame version optimised for air cooling
- Low ripple and noise
- Fixed switching frequency
- High capacitive load capability
- Pre-bias start-up capability
- High reliability
- RoHS 6/6 compliant
- UL94 V-0 materials
- DOSA footprint compliant
- Two year warranty (consult factory for extended terms)

### SAFETY

- EN60950
- CSA
- CE
- UL



### Electrical Specifications

Input	
Input range	18 - 75 VDC
Input surge	100 V / 100 mSec
Input UVLO	Turn-on: 17 Vdc nom Turn-off: 16 Vdc nom Hysteresis: 1 Vdc
Input current maximum	4 Amps
Efficiency (48 Vin, 25 °C ambient)	89.5% at 3V3 peak efficiency
I/O insulation	Basic insulation
I/O isolation	1500 Vdc
Output	
Output voltage	3V3 nominal set point
Output voltage regulation	3V3 ± 1%
Output current maximum	20 A @ 3V3 output voltage
Noise & ripple	40 mV pk-pk max (@ 3V3)
Overtemperature protection	Baseplate: 110 °C baseplate Open frame: 120 °C hotspot
Overvoltage protection Method / OVP operation	3.8 V nominal Auto recovery
Overcurrent protection Method / OCP operation	24 A nominal Auto recovery hiccup mode
Control	
Enable	Positive or Negative option
Output voltage trim range	-10% to +10% Vout
Switching frequency	330 KHz

### Environmental Specifications

Storage temperature	-40 °C to +105 °C
Ambient temperature	-40 °C to +85 °C
Baseplate operating temperature	-40 °C to +100 °C (no power derating)
MTBF	1 million hours target

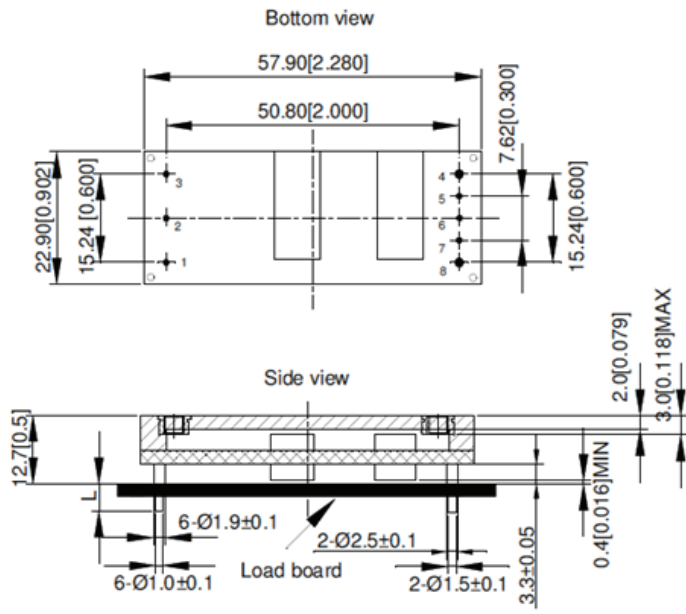
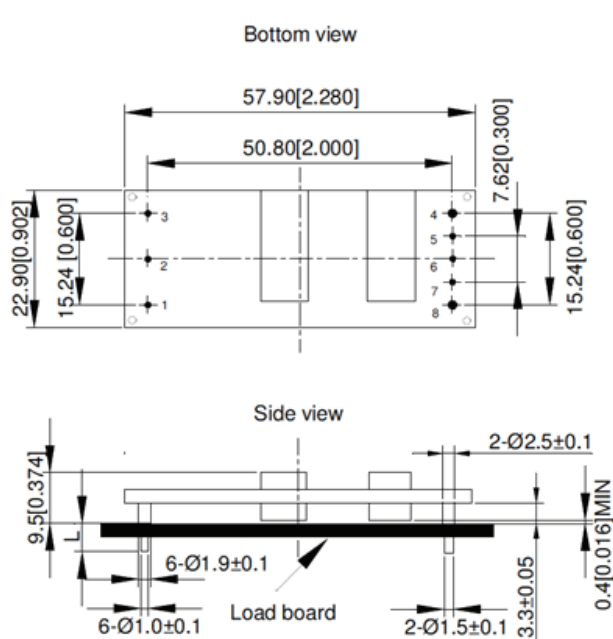
### Ordering Information

Model number	Input voltage	Output voltage set-point	Output Current	Efficiency
AVO75B-36S3V3-6L	18 - 75 Vdc	3V3 dc	20 A max	89.5% full load
AVO75B-36S3V3B-6L	18 - 75 Vdc	3V3 dc	20 A max	89.5% full load

"-6" = 3.8 mm pin length

"-L" = RoHS 6/6 compliant

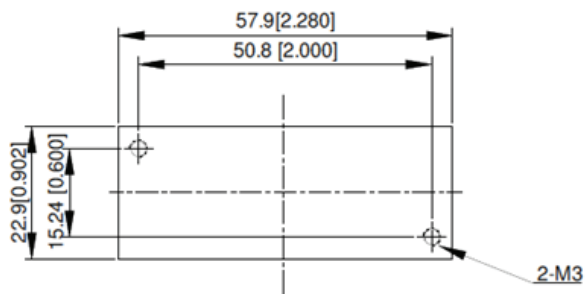
### Mechanical Drawings



Unit: mm [inch]      Bottom view: pin on upside  
 Tolerance: X.Xmm ± 0.5mm [X.X in. ± 0.02in.]  
 X.XXmm ± 0.25mm [X.XX in. ± 0.01in.]

### Pin Length Option

Device Code Suffix	L
-4	4.8 mm+/-0.5 mm
-6	3.8 mm+/-0.5 mm
-8	2.8 mm+/-0.25 mm
NONE	5.8 mm+/-0.5 mm



Unit: mm [inch]      Bottom view: pin on upside  
 Tolerance: X.Xmm ± 0.5mm [X.X in. ± 0.02in.]  
 X.XX mm ± 0.25mm [X.XX in. ± 0.01in.]

## Pin Designations

Pin No.	Function	Pin No.	Function
1	+Vin	5	+Sense
2	CNT	6	Trim
3	-Vin	7	-Sense
4	+Vo	8	-Vo

**Notes:**

1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

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