

- Wide 2 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 500V Isolation
- Full EMI Shielding

## AV20 Series



Unit measures 1.6"W x 2"L x 0.38"H

### MODEL SELECTIONS

Output Voltage	Output Amps	Input Range	Model Number
<b>SINGLE OUTPUT</b>			
3.3 VDC	4	18-36VDC	AV20-24S03
	4	36-75VDC	AV20-48S03
5 VDC	4	18-36VDC	AV20-24S05
	4	36-75VDC	AV20-48S05
12 VDC	1.67	18-36VDC	AV20-24S12
	1.67	36-75VDC	AV20-48S12
15 VDC	1.33	18-36VDC	AV20-24S15
	1.33	36-75VDC	AV20-48S15
<b>DUAL OUTPUT</b>			
+/-5 VDC	+/-2	18-36VDC	AV20-24D05
	+/-2	36-75VDC	AV20-48D05
+/-12 VDC	+/-0.84	18-36VDC	AV20-24D12
	+/-0.84	36-75VDC	AV20-48D12
+/-15 VDC	+/-0.67	18-36VDC	AV20-24D15
	+/-0.67	36-75VDC	AV20-48D15

**Contact  
 Factory  
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 High Volume  
 Pricing**

# ASTRODYNE **Telecom** Isolated and Regulated 20 Watt Modular DC/DC Converters

All specifications are typical at nominal input, full load, and 25DegC unless otherwise noted

## INPUT SPECIFICATIONS

Input Voltage, Nominal	24VDC, 48VDC
Input Voltage Ranges	18-36, 36-75VDC
Input Surge Voltage	50V (24V Models), * 100V (48V Models), * 100 mS duration

## OUTPUT SPECIFICATIONS

Voltage and Current Load Regulation	See Selection Chart Singles: +/- 0.5% , Duals: +/- 0.5% (10% to 100% Load)
Line Regulation	+/- 0.2%, typ
Temperature Coefficient	+/-0.02%/DegC
Ripple/Noise(Single/Dual)	80 mV Pk-Pk, typ
Overcurrent Protection	Clamp, 110-160% *
Output Voltage Tolerance	+/-1%, max
Short Circuit Protection	Continuous, self-recovering

## GENERAL SPECIFICATIONS

On/Off Control	Logic 0=off, Logic 1=on
Shutdown Idle Current	24V            48V 25mA           15mA
Input-Out Isolation	500VDC
In/Out Capacitance	5nF
Efficiency	80%, typ
Switching Frequency	280Khz

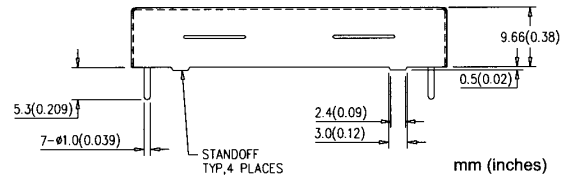
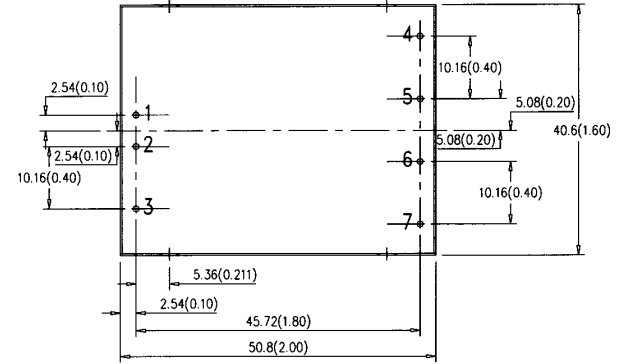
## ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +95 DegC
Storage Temperature	-40 to +105 DegC *
Maximum Case Temp	100 DegC *
Input Fusing	24V: 4A, 48V: 2A
MTBF	2420 kHrs Bellcore TR332, 25°C To TR-EOP-000063
Shock/Vibration	1.71 oz, (48g)
Weight	CSA C22.2 no. 234 & no. 950
Safety Certification	UL 1950 TUV EN 60950 CE - low voltage directive 73/23/EEC

## PHYSICAL SPECIFICATIONS

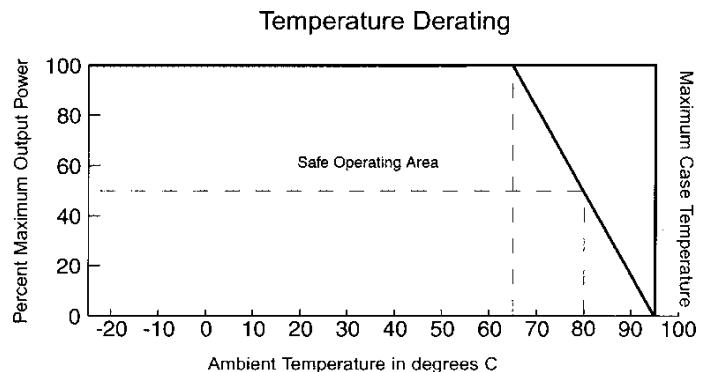
Case Material	Metal Shield
Construction	Fully Encapsulated

## MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	- Input	- Input
3	Control	Control
4	No Pin	+ Output
5	+ Output	Common
6	- Output	- Output
7	Trim	Trim

## OUTPUT DERATING CURVE



**Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.**

\* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.