

Unit measures 0.8"W x 1.25"L x 0.4"H

- Low Ripple and Noise
- PI Input Filter
- Regulated Outputs
- 500V Isolation
- 5 Sided EMI Shielding
- Standard 24 Pin DIP & SMD Packages

Model Number	Output Voltage	Output mAmps	Input Range	Input Current	Efficiency	Max. Capacitive Load
SINGLE OUTPUT						
DR1P5-05S05(SMD)	5 VDC	300	4.5-5.5 VDC	600mA	54%	470uF
DR1P5-12S05(SMD)		300	10.8-13.2 VDC	245mA	55%	470uF
DR1P5-24S05(SMD)		300	21.6-26.4 VDC	125mA	54%	470uF
DR1P5-05S12(SMD)	12 VDC	125	4.5-5.5 VDC	625mA	52%	330uF
DR1P5-12S12(SMD)		125	10.8-13.2 VDC	260mA	52%	330uF
DR1P5-24S12(SMD)		125	21.6-26.4 VDC	130mA	52%	330uF
DR1P5-05S15(SMD)	15 VDC	100	4.5-5.5 VDC	588mA	55%	330uF
DR1P5-12S15(SMD)		100	10.8-13.2 VDC	245mA	55%	330uF
DR1P5-24S15(SMD)		100	21.6-26.4 VDC	123mA	55%	330uF
DUAL OUTPUT						
DR1P5-05D05(SMD)	+/-5 VDC	+/-150	4.5-5.5 VDC	682mA	48%	330uF
DR1P5-12D05(SMD)		+/-150	10.8-13.2 VDC	278mA	49%	330uF
DR1P5-24D05(SMD)		+/-150	21.6-26.4 VDC	142mA	48%	330uF
DR1P5-05D12(SMD)	+/-12 VDC	+/-60	4.5-5.5 VDC	632mA	51%	110uF
DR1P5-12D12(SMD)		+/-60	10.8-13.2 VDC	255mA	51%	110uF
DR1P5-24D12(SMD)		+/-60	21.6-26.4 VDC	128mA	51%	110uF
DR1P5-05D15(SMD)	+/-15 VDC	+/-50	4.5-5.5 VDC	600mA	54%	110uF
DR1P5-12D15(SMD)		+/-50	10.8-13.2 VDC	250mA	54%	110UF
DR1P5-24D15(SMD)		+/-50	21.6-26.4 VDC	125mA	54%	110UF

Note - (SMD) Denotes that these products are available in a Surface Mount Technology Package. (Please see page 3) To order a DR1P5 product with the optional Surface Mount Package, simply add "SMD" to the end of the standard Part Number. For example DR1P5-05S05SMD.



Isolated and Regulated 1.5 WATT Modular DC/DC Converters

DR1P5 series

INPUT SPECIFICATIONS

Input Voltage Ranges:	5 VDC Nominal	4.5-5.5 VDC
	12 VDC Nominal	10.8-13.2 VDC
	24 VDC Nominal	21.6-26.4 VDC
Input Filter	PI Type	

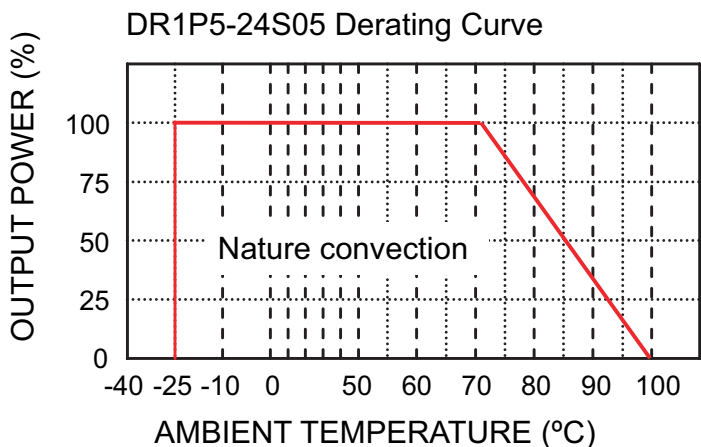
OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Load Regulation 20% to FL	
D05	+/- 1.5%
All Others	+/- 0.5%
Cross Regulation	
Asymmetrical Load 25/100%	+/- 5%
Line Regulation	+/- 0.3%
Temperature Coefficient	+/- 0.02%/DegC
Ripple/Noise(Single/Dual)	50mV Pk-Pk, typ
Voltage Accuracy	+/- 4%, max
Short Circuit Protection	Short Term

GENERAL SPECIFICATIONS

Input-Out Isolation	500VDC
In/Out Capacitance	30 pF
Efficiency	52%, typ
Switching Frequency	20Khz
Isolation Resistance	10000 M Ohms

OUTPUT DERATING CURVE



ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +71 DegC(FL)
Relative Humidity	5 to 95%, RH
Storage Temperature	-55 to +105 DegC *
Maximum Case Temp	100 DegC *
Thermal Impedance	20DegC/Watt
Thermal Shock	MIL-STD-810D
Vibration	10-55Hz, 10G, 30 Minutes along X, Y, and Z
MTBF	5.53 Mhrs BELLCORE TR NWT 000332 Case1: 50% Stress, Temp at 40DegC, Ground Fixed and controlled environment
EMC	
Conducted Emissions	EN55022 Class A
Radiated Emissions	EN55022 Class A
ESD	EN61000-4-2 Criteria B
Radiated Immunity	EN61000-4-3 Criteria A
Fast Transient	EN61000-4-4 Criteria B
Surge	EN61000-4-5 Criteria B
Conducted Immunity	EN61000-4-6 Criteria A

PHYSICAL SPECIFICATIONS

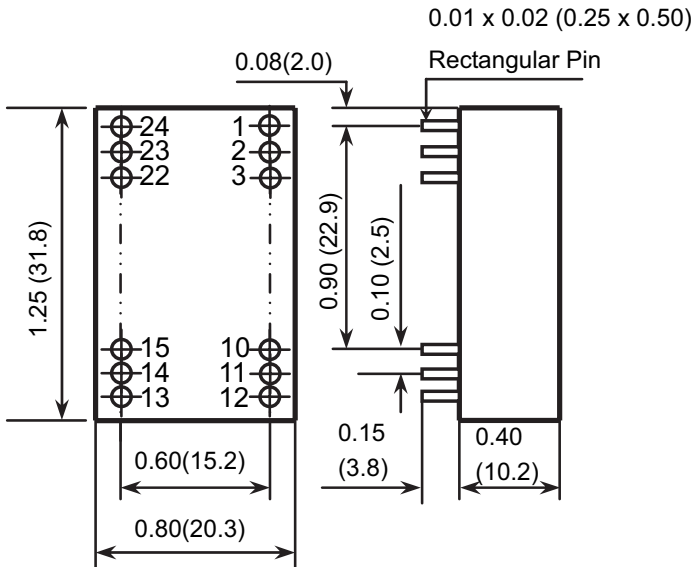
Dimensions	1.25x0.80x0.40"
Case Material	Nickel-Coated Copper with Non-Conductive Base
Potting Material	Epoxy (UL-94-V0)
Construction	Fully Encapsulated
Weight	
DIP	15.6g (0.55 oz)
SMD	18g (0.62 oz)

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

* 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.

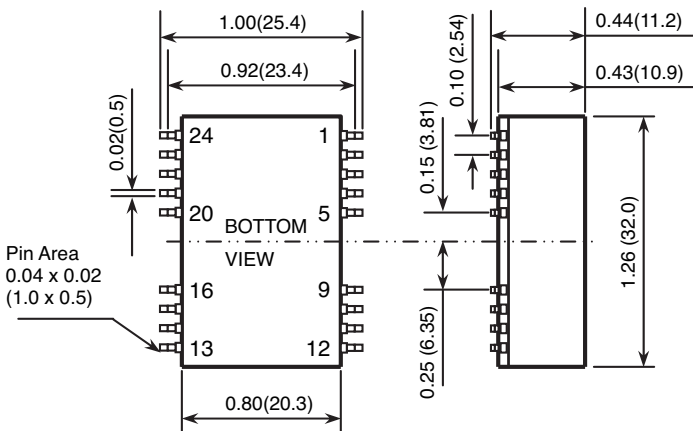
Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.

MECHANICAL DIMENSIONS



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	NC	- Output
3	NC	Common
10	- Output	Common
11	+ Output	+ Output
12	- Input	- Input
13	- Input	- Input
14	+ Output	+ Output
15	- Output	Common
22	NC	Common
23	NC	- Output
24	+ Input	+ Input

SUFFIX - SMD



Pin #	Single Outputs	Dual Outputs
1	+ Input	+ Input
2	NC	- Output
3	NC	Common
10	- Output	Common
11	+ Output	+ Output
12	- Input	- Input
13	- Input	- Input
14	+ Output	+ Output
15	- Output	Common
22	NC	Common
23	NC	- Output
24	+ Input	+ Input
Others	NC	NC