



- Wide 2 : 1 Input Range
- High Efficiency
- Regulated Outputs
- 1600V Isolation
- Full EMI Shielding
- Standard Pinouts

Unit measures 1"W x 2"L x 0.41"H

Model Number	Output Voltage	Output Amps	Input Range
ST15-123.3S	3.3 VDC	4	9-18VDC
ST15-243.3S		4	18-36VDC
ST15-483.3S		4	36-75VDC
ST15-125S	5 VDC	3	9-18VDC
ST15-245S		3	18-36VDC
ST15-485S		3	36-75VDC
ST15-1212S	12 VDC	1.25	9-18VDC
ST15-2412S		1.25	18-36VDC
ST15-4812S		1.25	36-75VDC
ST15-1215S	15 VDC	1	9-18VDC
ST15-2415S		1	18-36VDC
ST15-4815S		1	36-75VDC
ST15-1224S	24 VDC	0.625	9-18VDC
ST15-2424S		0.625	18-36VDC
ST15-4824S		0.625	36-75VDC



Isolated and Regulated 15 Watt Modular DC/DC Converters

**ST15 series**

### INPUT SPECIFICATIONS

Input Voltage, Nominal	12VDC, 24VDC, 48VDC
Input Voltage Ranges	9-18, 18-36, 36-75 VDC
Input Surge Voltage	50V (12/24V Models), * 100V (48V Models), * 10 mS duration, min.
Input Fusing	4A: 12/24Vin Models 2A: 48Vin Models
Input Filter	PI Type

### OUTPUT SPECIFICATIONS

Voltage and Current	See Selection Chart
Max. Output Power	13.2 Watts 3.3VDC O/P 15 Watts all others
Voltage Accuracy	+/-2%
Load Regulation	10% - FL +/-1%
Line Regulation	HL-LL +/-0.5%
Temperature Coefficient	+/-0.02%/°C
Ripple	<0.2% Vout + 20mV (Vp-p) max.
Noise	<0.5% Vout + 50mV (Vp-p) max.
Overvoltage Protection	Zener Diode Clamp *
Overcurrent Protection	120% of Rated, Auto Recovery
Short Circuit Protection	Current Limit, self-recovering
Efficiency	3.3 Vout = 79% 5 Vout = 82% 12, 15 & 24 Vout = 83%

### PHYSICAL SPECIFICATIONS

Dimensions	2"x1"x0.413"
Case Material	Nickel Coated Copper with Non-Conductive Base Connected to O/P Ground
Construction	Fully Encapsulated
Weight	1.1 oz, (30g)

### GENERAL SPECIFICATIONS

Input-Out Isolation	1600VDC
Input-Output Resistance	10-9th Ohms
In/Out Capacitance	1000 pF
Switching Frequency	400Khz

### ENVIRONMENTAL SPECIFICATIONS

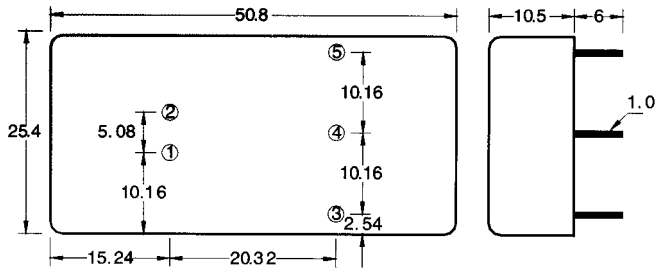
Oper. Temperature	-20 to +60°C(See Derate)
Storage Temperature	-55 to +105°C *
Maximum Case Temp	95°C *
Humidity	95%RH *
Cooling	Free Air Convection
MTBF	>800,000 Hrs @ 25°C MIL-HDBK-217F
EMI (Conducted & Radiated)	EN 55022 class A

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.

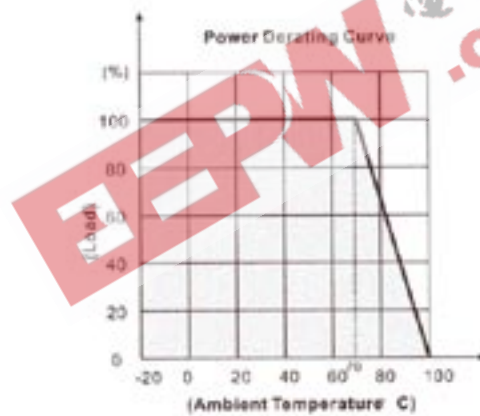
**Astrodyne products are not authorized or warranted for use as critical components in life support systems, equipment used in hazardous environments, nuclear controls systems, or other mission-critical applications.**

### MECHANICAL DIMENSIONS



Pin #	Function
1	+ Input
2	- Input
3	+ Output
4	N/A
5	- Output

### DERATING



### BLOCK DIAGRAM

#### Single Output

