



- Wide 2 : 1 and 4 : 1 Input Ranges
- High Efficiency
- Regulated Outputs
- 1600V Isolation
- Full EMI Shielding
- Standard Pinouts

Unit measures 1"W x 2"L x 0.425"H

Model Number	Output Voltage	Output Amps	Input Range
ST10-123.3S	3.3 VDC	2	9-18VDC
ST10-243.3S		2	18-36VDC
ST10-24F3.3S		2	10-40VDC
ST10-483.3S		2	36-75VDC
ST10-48F3.3S		2	18-75VDC
ST10-125S	5 VDC	2	9-18VDC
ST10-245S		2	18-36VDC
ST10-24F5S		2	10-40VDC
ST10-485S		2	36-75VDC
ST10-48F5S		2	18-75VDC
ST10-1212S	12 VDC	0.83	9-18VDC
ST10-2412S		0.83	18-36VDC
ST10-24F12S		0.83	10-40VDC
ST10-4812S		0.83	36-75VDC
ST10-48F12S		0.83	18-75VDC
ST10-1215S	15 VDC	0.67	9-18VDC
ST10-2415S		0.67	18-36VDC
ST10-24F15S		0.67	10-40VDC
ST10-4815S		0.67	36-75VDC
ST10-48F15S		0.67	18-75VDC
ST10-1224S	24 VDC	0.42	9-18VDC
ST10-2424S		0.42	18-36VDC
ST10-4824S		0.42	36-75VDC



Isolated and Regulated 10 Watt Modular DC/DC Converters

ST10 series

INPUT SPECIFICATIONS

Input Voltage, Nominal	12VDC, 24VDC, 48VDC
Input Voltage Ranges	9-18, 18-36, 36-75, 10-40 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	7 Watts 3.3VDC O/P 10 Watts all others
Voltage Accuracy	+/- 2%
Load Regulation	10% - FL +/- 1%
Minimum Load (3.3 & 5Vout)	3% 0% All other outputs
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 = 78% 5 Vout = 81% 12 & 15 Vout = 82% 24 Vout = 83%

PHYSICAL SPECIFICATIONS

Dimensions	2"x1"x0.425"
Case Material	Nickel Coated Copper with Non-Conductive Base Connected to O/P Ground 6 Sided Shielding
Construction	Fully Encapsulated
Weight	1.13 oz, (32g)

GENERAL SPECIFICATIONS

Input-Out Isolation	1600VDC
Input-Output Resistance	10-9th Ohms
In/Out Capacitance	1000 pF
Switching Frequency	300Khz

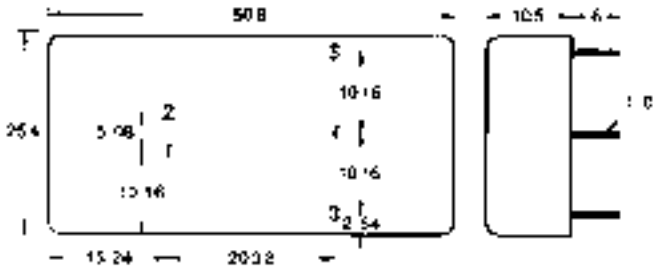
ENVIRONMENTAL SPECIFICATIONS

Oper. Temperature	-25 to +70°C(See Derate)
Storage Temperature	-55 to +105°C *
Maximum Case Temp	100°C max. *
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

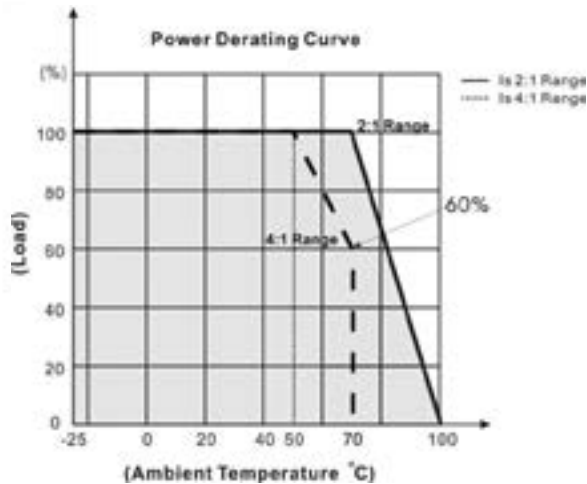
* These are stress ratings. Exposure of the devices to any of these conditions may adversely affect long term reliability. Proper operation under conditions other than the standard operating conditions is neither warranted nor implied.

MECHANICAL DIMENSIONS



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

DERATING



BLOCK DIAGRAM

Single Output

