25 to 30 Watt 2x2 Inch Metal Case H
2:1 Input Range

- **Wide Input Range**
- **Pi Input Filter**
- **Single, Dual & Triple Output**
- **Remote On/Off Control**
- **Continuous Short Circuit Protection**
- **Efficiency up to 85%**

MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT	INPUT CURRENT		% EFF
				NO LOAD	FULL LOAD	
25HRS12W3.3LC	9-18 VDC	3.3 VDC	5000 mA	30 mA	1860 mA	74
25HRS12W5LC		5 VDC	5000 mA		2675 mA	78
30HRS12W12LC		12 VDC	2500 mA		3050 mA	82
30HRS12W15LC		15 VDC	2000 mA			
25HRD12W5LC		±5 VDC	±2500 mA	35 mA	2675 mA	78
30HRD12W12LC		±12 VDC	±1250 mA		3050 mA	82
30HRD12W15LC		±15 VDC	±1000 mA			
30HRT12W5/12LC		5/±12 VDC	+3500/±310 mA		2640 mA	79
30HRT12W5/15LC		5/±15 VDC	+3500/±250 mA			
25HRS24W3.3LC	18-36 VDC	3.3 VDC	5000 mA	30 mA	920 mA	75
25HRS24W5LC		5 VDC	5000 mA		1336 mA	79
30HRS24W12LC		12 VDC	2500 mA		1525 mA	82
30HRS24W15LC		15 VDC	2000 mA			
25HRD24W5LC		±5 VDC	±2500 mA		1336 mA	79
30HRD24W12LC		±12 VDC	±1250 mA		1470 mA	85
30HRD24W15LC		±15 VDC	±1000 mA			
30HRT24W5/12LC		5/±12 VDC	+3500/±310 mA		1320 mA	80
30HRT24W5/15LC		5/±15 VDC	+3500/±250 mA			
25HRS48W3.3LC	36-72 VDC	3.3 VDC	5000 mA	20 mA	460 mA	75
25HRS48W5LC		5 VDC	5000 mA		660 mA	79
30HRS48W12LC		12 VDC	2500 mA		765 mA	82
30HRS48W15LC		15 VDC	2000 mA			
25HRD48W5LC		±5 VDC	±2500 mA	25 mA	660 mA	79
30HRD48W12LC		±12 VDC	±1250 mA		735 mA	85
30HRD48W15LC		±15 VDC	±1000 mA			
30HRT48W5/12LC		5/±12 VDC	+3500/±310 mA		655 mA	80
30HRT48W5/15LC		5/±15 VDC	+3500/±250 mA			

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS	
Input Voltage Range	2:1
Input Filter	Pi Type

OUTPUT SPECIFICATIONS		
Voltage Accuracy	Single & Dual +Output Dual -Output Triple 5V Output Triple 12V/15V Output	±2% max. ±3% max. ±2% max. ±5% max.
Voltage Balance, Dual Output at Full Load		±1% max.
Transient Response Single, 25% Step Load Change Dual, Full Load to Half Load ±1% Error Band		<500 µsec.
External Trim Adj. Range		±10%
Ripple and Noise at 20MHz BW		10 mV RMS max. 75 mV p-p max.
Temperature Coefficient		±0.02%/°C max.
Short Circuit Protection		Continuous
Line Regulation[1)]	Single & Dual Output Triple Output	±0.5% max. ±1% max.
Load Regulation[2)]	Single & Dual Output Triple Output	±1% max. ±5% max.

NOTE:
1. Line Regulation measured from High Line to Low Line.
2. Load Regulation measured from Full Load to 1/4 Load.

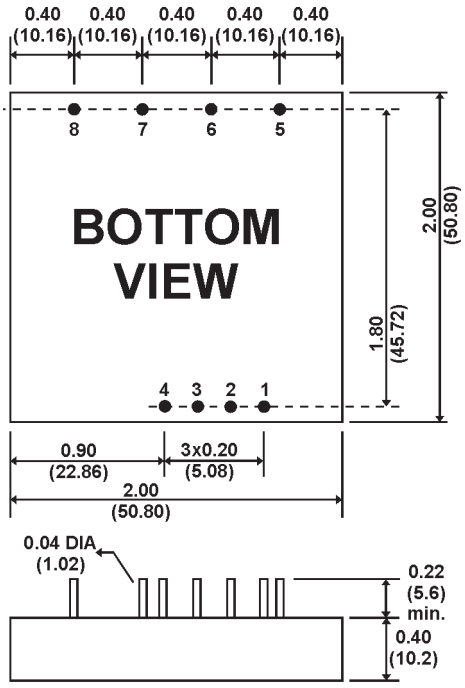
GENERAL SPECIFICATION	
Efficiency	see table
Case Grounding	Connected to Output Common
Isolation Voltage	500 VDC min.
Isolation Resistance	1000 Mohms
Switching Frequency	300 kHz
Operating Temperature Range	-25°C to + 60°C
Storage Temperature Range	-55°C to + 105°C
Derating >+60°C	-2.5%/°C
Cooling	Free-Air Convection
EMI/RFI	Six-Sided Continuous Shield
Case Material	Black Coated Copper with Non-Conductive Base
MTBF (MIL-HDBK-217F)	min. 790.000 hrs
Dimensions	2x2x0.4 Inches (50.8x50.8x10.2 mm)

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

MECHANICAL SPECIFICATIONS

CASE "H"



All Dimensions in Inches (mm)
Tolerances: x.xx = 0.04 Inches (x.xxx = 0.010 mm)

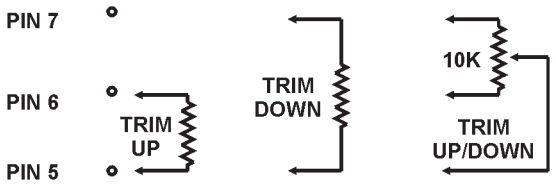
PIN CONNECTIONS			
PIN	**SINGLE**	**DUAL**	**TRIPLE**
1	REMOTE ON/OFF CONTROL		
2	NO PIN	NO PIN	NO PIN
3	-INPUT	-INPUT	-INPUT
4	+INPUT	+INPUT	+INPUT
5	TRIM	TRIM	-AUX. OUT
6	-OUTPUT	-OUTPUT	COMMON
7	+OUTPUT	COMMON	+5V OUT
8	NO PIN	+OUTPUT	+AUX. OUT

APPLICATION NOTES & DIAGRAMS

REMOTE ON/OFF CONTROL	
Logic Compatibility	CMOS or Open Collector TTL
Ec-ON	>+5.5VDC or Open Circuit
Ec-OFF	<1.8VDC
Shutdown Idle Current	10mA
Control Common	Referenced to Input Minus

External Output Trimming

Output may optionally be externally trimmed (±10%) with a fixed resistor or an external trimpot as shown.



TRIPLE OUTPUT LOADING [1]			
OUTPUT (PIN NO.)	**VOLTAGE**	**AMPERES**	
		MIN.[2]	**NOM.**
7	+5 VDC	0.5 A	3.5 A
8 & 5	±12 VDC	0.1 A	0.31 A
8 & 5	±15 VDC	0.1 A	0.25 A

NOTE:
1) Maximum total power from all outputs is limited to 25 watts but no output should be allowed to exceed its maximum current.
2) Minimum current on each output is required to maintain specified regulation.

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