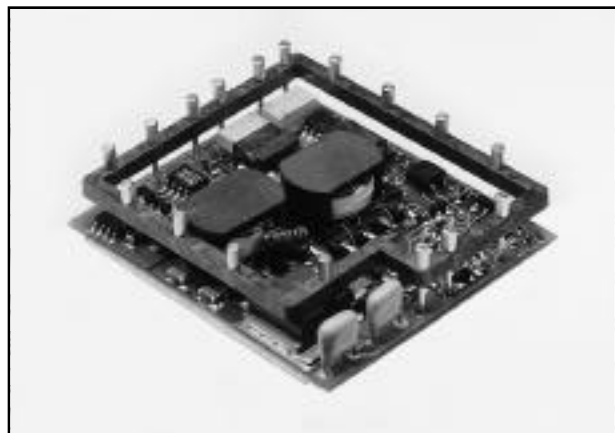


SLV40 SERIES

SINGLE OUTPUTS



PATENT PENDING

FEATURES:

- High Efficiency to 90% @ 5V
- Pick & Place Packaging
- External Trim
- -40C To +100C Operation
- 1500Vdc Isolation
- Synchronous Rectification
- Open Frame Construction
- **Surface Mount & Thru-Hole Types**
- Wide Input Range 2:1
- Remote On/Off
- Under-Voltage Lockout
- Overvoltage & Short Circuit Protection
- Integral Metal Substrate

The SLV40 series of DC-DC converters have been designed as a surface-mount & thru-hole solution for a wide range of applications where low voltage, high efficiency and ease of assembly are needed. Utilizing the latest thermal transfer techniques the SLV40 series packs up to 40 watts of power in 1.75" x 2.0" x .500" open frame construction and operating temperatures of -40c to + 105C. All models are designed to meet UL1950, CSA 950 and EN 60950.

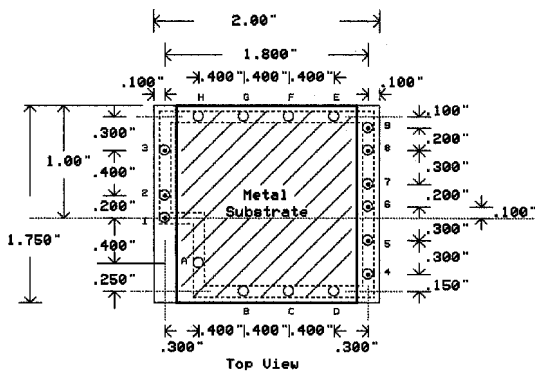
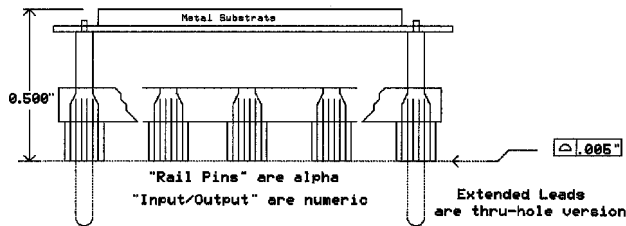
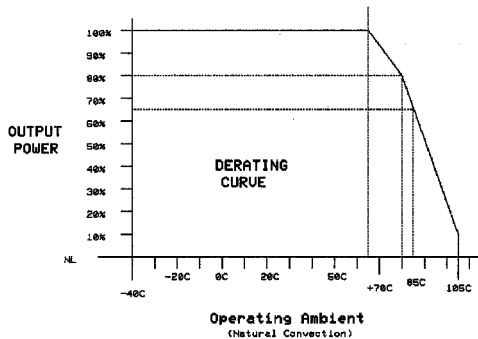
MODEL SELECTION GUIDE:

INPUT VOLTAGE NOM. RANGE	I_{in} @ VIN NOM. FL NL	OUTPUT VOLTAGE	OUTPUT CURRENT(FL)	PO (W)	OUTPUT OVP	TYPICAL EFFICIENCY	MODEL NUMBER NOTE (**)
12Vdc 9-18Vdc	1.132 10 mA	1.80	6	11	3.6	81%	SLV40-12S1V8(**)
12Vdc 9-18Vdc	1.488 10 mA	2.50	6	15	3.6	84%	SLV40-12S2V5(**)
12Vdc 9-18Vdc	1.938 10 mA	3.30	6	20	3.9	86%	SLV40-12S3V3
12Vdc 9-18Vdc	2.809 10 mA	5.00	6	30	6.8	89%	SLV40-12S05(**)
24Vdc 18-36Vdc	0.720 10 mA	1.80	8	14	3.6	81%	SLV40-24S1V8(**)
24Vdc 18-36Vdc	0.992 10 mA	2.50	8	20	3.6	84%	SLV40-24S2V5(**)
24Vdc 18-36Vdc	1.260 10 mA	3.30	8	26	3.9	86%	SLV40-24S3V3(**)
24Vdc 18-36Vdc	1.873 10 mA	5.00	8	40	6.8	89%	SLV40-24S05(**)
48Vdc 36-75Vdc	0.356 10 mA	1.80	8	14	3.6	82%	SLV40-48S1V8(**)
48Vdc 36-75Vdc	0.490 10 mA	2.50	8	20	3.6	85%	SLV40-48S2V5(**)
48Vdc 36-75Vdc	0.623 10 mA	3.30	8	26	3.9	87%	SLV40-48S3V3(**)
48Vdc 36-75Vdc	0.926 10 mA	5.00	8	40	6.8	90%	SLV40-48S05(**)

Note (**): Insert suffix: **SM** for Surface-mount type or **TH** for Thru-hole Type mounting • **MODIFICATIONS AND CUSTOMS AVAILABLE**

40 WATT DC-DC

SPECIFICATIONS: All Specifications Are Typical @ Nominal Input, Full Load & 25°C Unless Otherwise Stated and are Subject to Change without Notice



PIN CONNECTIONS

PIN NUMBER	SINGLE OUTPUTS
1	+Vin
2	-Vin
3	ON/OFF
4	+Sense
5	-Sense
6	Trim down(2)
7	+Vo
8	-Vo
9	Trim
A	N/C
B	N/C
C	N/C
D	N/C
E	N/C
F	N/C
G	N/C
H	N/C

Pin no.'s A -H are used for mechanical integrity and are intended for Surface Mount models only.

INPUT

Input Voltage Range	2:1
Note (3)	9-18Vdc (12V Models) 18-36Vdc (24V Models) 36-75Vdc (48V Models)
Input filter	Capacitive
Under Voltage Lockout	8.5V (12V Models) 16.5V (24V Models) 32V (48V Models)
Remote	:ON +5V or open, Ref. (-)Vin :OFF +0.7V, Ref (-)Vin
Conducted Noise	EN55022, level A (Note 5)

OUTPUT

Output Power	40 W Continuous(Max)
Output Voltage/current	See Model Table
Output Setting Accuracy	
Singles	+/- 1% typ., +/- 1.5%max.
Load Regulation	
Singles(FL-NL)	+/- 0.5% Note (4)
Line Regulation	+/- 0.2%
Total Error Band	
Singles	+/- 3%, Line/Load&Temp.
Ripple & Noise(20Mhz BW)	50mV
Transient Response (FL-1/2L)	2 % Deviation, 200uS
Temperature Coefficient	+/- .01%/c
Short circuit Protection	Indefinite, Modulated, Automatic Recovery

GENERAL

Efficiency	See Model Table
Isolation Voltage	1500Vdc (1Min)
Isolation Resistance	100M
Switching Frequency	350Khz
MTBF	1.0M hrs.MIL-HDBK-217F Ground Benign @ 25C

ENVIRONMENTAL

Operating Temperature Range	-40C To +105C (See Derating Curve) -40C To +65C@ FL
Storage Temperature Range	-55C To +125C
Maximum Case Temperature	110 C
Humidity	5% To 95% RH, Non-condensing
Cooling	Natural Convection
Processing (Note 2)	(230C peak, 20 sec.)

MECHANICAL

Size	1.75" X 2.00" X 0.500"
Weight	27.5G
Mounting	SMD & Through Hole Types
Case/Material	Open-Frame, 94V-0 FR-4 P.C.B., with Bonded Aluminum Substrate

NOTES:

- 1) Output Power is up to 40W, see Io rating On "Model selection Guide".
- 2) Consult factory for recommended reflow profile.
- 3) Typical start-up for 12Vin models is 9V. Maximum startup is 9.5V.
- 4) Operation is allowed to No-Load, however operation below 10% load may cause ripple & noise to exceed spec.
- 5) External filter components are required to meet level "A" or "B"