SLV20 SERIES
SINGLE OUTPUTS

The SLV20 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. The SLV20 series packs up to 20 watts of power in 1.00" x 2.0" x .400" open frame construction and operating temperatures of -40°C to +105°C. All models are designed to meet UL1950, CSA 950 and EN 60950.

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

FEAURES:

**MODEL SELECTION GUIDE:**

<table>
<thead>
<tr>
<th>INPUT VOLTA GE NOM.</th>
<th>OUTPUT VOLTA GE</th>
<th>OUTPUT CURRENT(FL)</th>
<th>PO (W)</th>
<th>OUTPUT OVP</th>
<th>TYPICAL EFFICIENCY</th>
<th>MODELNUMBER NOTE (**)</th>
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<td>12Vdc 9-18Vdc</td>
<td>0.823</td>
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Note (**) Insert suffix; SM for Surface-mount type or TH for Thru-hole Type mounting

MODIFICATIONS AND CUSTOMS AVAILABLE
20 WATT DC-DC

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

INPUT

- Input Voltage Range
  - Note (3) 2:1
  - 9-18Vdc (12V Models)
  - 18-36Vdc (24V Models)
  - 36-75Vdc (48V Models)
- Input filter
- 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 20 W Continuous(Max)
- See Model Table
- Output Voltage/current
- 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) 75mV
- 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 (1 Min)
- Isolation Resistance 100M
- Switching Frequency 400Khz
- MTBF 1.0M hrs. MIL-HDBK-217F Ground Benign @ 25C

ENVIRONMENTAL

- Operating Temperature Range -40C To +105C (See Derating Curve)
- Storage Temperature Range -55C To +125C
- Maximum Junction Temperature 125 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
- Mounting SMD & Through Hole Types
- Case/Material Open-Frame, 94V-0 FR-4 P.C.B.

NOTES:

1) Output Power is up to 20W, see Io rating On "Model selection Guide".
2) Model numbers are for SMD type pin configuration, replace suffix (SM) with (TH) for throughhole type
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.