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Features :

- 2:1 wide input range
- Protections: Short circuit / Overload / Over voltage
- 1500VAC I/O isolation
- Built-in EMI filter, low ripple noise
- $100 \%$ full load burn-in test
- Fixed switching frequency at 83 KHz
- Low cost
- High reliability
- 2 years warranty

SPECIFICATION

| MODEL |  | SD-25A-5 | SD-25B-5 | SD-25C-5 | SD-25A-12 | SD-25B-12 | SD-25C-12 | SD-25A-24 | SD-25B-24 | SD-25C-24 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| OUTPUT | DC VOLTAGE | 5 V |  |  | 12 V |  |  | 24 V |  |  |
|  | RATED CURRENT | 5A |  |  | 2.1A |  |  | 1.1A |  |  |
|  | CURRENT RANGE | 0~5A |  |  | $0 \sim 2.1 \mathrm{~A}$ |  |  | 0~1.1A |  |  |
|  | RATED POWER | 25W |  |  | 25.2 W |  |  | 26.4 W |  |  |
|  | RIPPLE \& NOISE (max.) Note. 2 | 100 mVp -p |  |  | 120 mV p-p |  |  | 150 mVp -p |  |  |
|  | VOLTAGE ADJ. RANGE | 4.5 ~ 5.5VDC |  |  | 11 ~ 16VDC |  |  | $23 \sim 30 V D C$ |  |  |
|  | VOLTAGE TOLERANCE Note. 3 | $\pm 2.0 \%$ |  |  | $\pm 1.0 \%$ |  |  | $\pm 1.0 \%$ |  |  |
|  | LINE REGULATION | $\pm 0.5 \%$ |  |  | $\pm 0.3 \%$ |  |  | $\pm 0.2 \%$ |  |  |
|  | LOAD REGULATION | $\pm 0.5 \%$ |  |  | $\pm 0.3 \%$ |  |  | $\pm 0.2 \%$ |  |  |
|  | SETUP, RISE, HOLD UP TIME | $2.5 \mathrm{~s}, 50 \mathrm{~ms},-----$ at full load |  |  |  |  |  |  |  |  |
| INPUT | VOLTAGE RANGE | A:9.2 ~ 18VDC B:19~36VDC C:36~72VDC |  |  |  |  |  |  |  |  |
|  | EFFICIENCY (Typ.) | 71\% | 72\% | 74\% | 72\% | 75\% | 78\% | 75\% | 78\% | 81\% |
|  | DC CURRENT | 3.2A/12V | 1.6A/24V | 0.8A/48V | 3.2A/12V | 1.6A/24V | 0.8A/48V | $3.2 \mathrm{~A} / 12 \mathrm{~V}$ | 1.6A/24V | 0.8A/48V |
| PROTECTION | OVERLOAD | 105 ~ 150\% rated output power |  |  |  |  |  |  |  |  |
|  |  | Protection type : Hiccup mode, recovers automatically after fault condition is removed |  |  |  |  |  |  |  |  |
|  | OVER VOLTAGE | 5.75 ~ 6.75V/10\% load |  |  | 16.8 ~ 20V/10\% load |  |  | $31.5 \sim 37.5 \mathrm{~V} / 10 \%$ load |  |  |
|  |  | Protection type : Hiccup mode, recovers automatically after fault condition is removed |  |  |  |  |  |  |  |  |
| ENVIRONMENT | WORKING TEMP. | $-10 \sim+60^{\circ} \mathrm{C}$ (Refer to "Derating Curve") |  |  |  |  |  |  |  |  |
|  | WORKING HUMIDITY | 20~90\% RH non-condensing |  |  |  |  |  |  |  |  |
|  | STORAGE TEMP., HUMIDITY | $-20 \sim+85^{\circ} \mathrm{C}, 10 \sim 95 \% \mathrm{RH}$ |  |  |  |  |  |  |  |  |
|  | TEMP. COEFFICIENT | $\pm 0.03 \% /{ }^{\circ} \mathrm{C}\left(0 \sim 50^{\circ} \mathrm{C}\right)$ |  |  |  |  |  |  |  |  |
|  | VIBRATION | $10 \sim 500 \mathrm{~Hz}, 2 \mathrm{G} 10 \mathrm{~min} . / 1$ cycle, 60 min . each along $X, Y, Z$ axes |  |  |  |  |  |  |  |  |
|  <br> EMC <br> (Note 4) | SAFETY STANDARDS | Design refer to LVD |  |  |  |  |  |  |  |  |
|  | WITHSTAND VOLTAGE | I/P-O/P:1.5KVAC I/P-FG:2KVAC O/P-FG:0.5KVAC |  |  |  |  |  |  |  |  |
|  | ISOLATION RESISTANCE | I/P-O/P, I/P-FG, O/P-FG:100M Ohms / 500VDC / $25^{\circ} \mathrm{C} / 70 \%$ RH |  |  |  |  |  |  |  |  |
|  | EMC EMISSION | Compliance to EN55032 (CISPR32) Class B |  |  |  |  |  |  |  |  |
|  | EMC IMMUNITY | Compliance to EN61000-4-2,3,4,6,8, EN55024, heavy industry level, criteria A |  |  |  |  |  |  |  |  |
| OTHERS | MTBF | 374.3 K hrs min.(SD-25A) 365.9 K hrs min.(SD-25B) 377.5 K Hrs min.(SD-25C) $\quad$ MIL-HDBK-217F ( $25^{\circ} \mathrm{C}$ ) |  |  |  |  |  |  |  |  |
|  | DIMENSION | 99*97*36mm (L*W* ${ }^{\text {( }}$ ) |  |  |  |  |  |  |  |  |
|  | PACKING | $0.38 \mathrm{Kg} ; 45 \mathrm{pcs} / 17.8 \mathrm{Kg} / 0.9 \mathrm{CUFT}$ |  |  |  |  |  |  |  |  |
| NOTE | 1. All parameters NOT specially mentioned are measured at $12,24,48 \mathrm{VDC}$ input, rated load and $25^{\circ} \mathrm{C}$ of ambient temperature. <br> 2. Ripple \& noise are measured at 20 MHz of bandwidth by using a $12^{\prime \prime}$ twisted pair-wire terminated with a 0.1 uf $\& 47$ uf parallel capacitor. <br> 3. Tolerance : includes set up tolerance, line regulation and load regulation. <br> 4. The power supply is considered a component which will be installed into a final equipment. All the EMC tests are been executed by mounting the unit on a $360 \mathrm{~mm} * 360 \mathrm{~mm}$ metal plate with 1 mm of thickness. The final equipment must be re-confirmed that it still meets EMC directives. For guidance on how to perform these EMC tests, please refer to "EMI testing of component power supplies." (as available on http://www.meanwell.com) |  |  |  |  |  |  |  |  |  |


Terminal Pin No. Assignment

| Pin No. | Assignment | Pin No. | Assignment |
| :---: | :---: | :---: | :---: |
| 1 | DC INPUT V- | 4 | DC OUTPUT + V |
| 2 | DC INPUT V+ | 5 | DC OUTPUT -V |
| 3 | FG $\doteq$ |  |  |

## Block Diagram



Derating Curve
Static Characteristics(SD-25C-24V)


