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Jameco Part Number 190960



25W AC-DC Triple Output Desktop

P25A-T series



■ Features :

- 3 pole AC inlet IEC320-C14
- Class I power (with earth pin)
- Protections: Short circuit / Overload / Over voltage / Over temp.
- Fully enclosed plastic case
- Fix switching frequency and regulation
- Topology: Top switch circuit
- LED indicator for power on
- Approvals: UL / CUL / TUV / CB / CE
- 1 year warranty

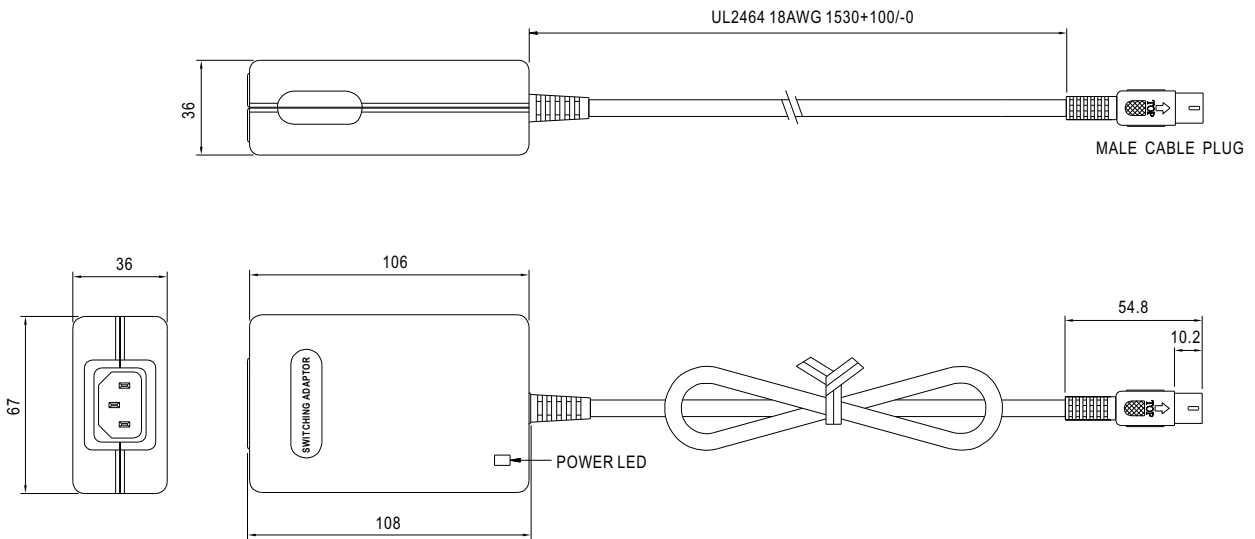


SPECIFICATION

ORDER NO.	P25A13A-R1B			P25A13D-R1B			P25A14E-R1B			
OUTPUT	SAFETY MODEL NO.	PSU25A-13A			PSU25A-13D			PSU25A-14E		
	DC VOLTAGE <small>Note.2</small>	5V	12V	-5V	5V	12V	-12V	5V	15V	-15V
	RATED CURRENT	2.5A	0.8A	0.3A	2.5A	0.8A	0.3A	2.5A	0.5A	0.3A
	CURRENT RANGE	0.5 ~ 2.5A	0.1 ~ 0.8A	0.1 ~ 0.3A	0.5 ~ 2.5A	0.1~0.8A	0.1~0.3A	0.5 ~ 2.5A	0.1 ~ 0.5A	0.1 ~ 0.3A
	RATED POWER	25W			25W			25W		
	RIPPLE & NOISE (max.) <small>Note.3</small>	50mVp-p	100mVp-p	100mVp-p	50mVp-p	100mVp-p	100mVp-p	50mVp-p	100mVp-p	100mVp-p
	VOLTAGE ADJ. RANGE	Fixed								
	VOLTAGE TOLERANCE <small>Note.4</small>	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±3.0%	±5.0%	±5.0%	±3.0%
	LINE REGULATION <small>Note.5</small>	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%	±1.0%
	LOAD REGULATION <small>Note.6</small>	±4.0%	±4.0%	±2.0%	±4.0%	±4.0%	±2.0%	±4.0%	±4.0%	±2.0%
SETUP, RISE, HOLD UP TIME	200ms, 50ms, 16ms at full load									
INPUT	VOLTAGE RANGE	90 ~ 264VAC 135 ~ 370VDC								
	FREQUENCY RANGE	47 ~ 63Hz								
	EFFICIENCY (Typ.)	70%			72%			74%		
	AC CURRENT	0.8A / 100VAC								
	INRUSH CURRENT (max.)	60A / 230VAC								
	LEAKAGE CURRENT (max.)	0.75mA / 240VAC								
PROTECTION	OVERLOAD	150 ~ 250% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed								
	OVER VOLTAGE	110 ~ 140% rated output voltage Protection type : Shut down o/p voltage, re-power on to recover								
ENVIRONMENT	WORKING TEMP.	0 ~ +40°C (Refer to output load derating curve)								
	WORKING HUMIDITY	20% ~ 90% RH non-condensing								
	STORAGE TEMP., HUMIDITY	-20 ~ +85°C, 10 ~ 95% RH								
	TEMP. COEFFICIENT	±0.03% / °C (0 ~ 50°C)								
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes								
SAFETY & EMC <small>(Note. 7)</small>	SAFETY STANDARDS	UL1950, CSA22.2, EN60950-1 Approved								
	WITHSTAND VOLTAGE	I/P-O/P:3KVAC, I/P-FG:1.5KVAC								
	ISOLATION RESISTANCE	I/P-O/P,I/P-FG:100M Ohms / 500VDC / 25°C / 70% RH								
	EMI CONDUCTION & RADIATION	Compliance to EN55022(CISPR22) class B								
	HARMONIC CURRENT	Compliance to EN61000-3-2,3 class A								
OTHERS	EMC IMMUNITY	Compliance to EN61000-4-2,3,4,5,6,11, Light industry level, criteria A								
	MTBF	520K hrs min. MIL-HDBK-217F (25°C)								
	DIMENSION	108*67*36mm (L*W*H)								
	PACKING	0.3kg ; 54pcs/ 20kg / CARTON								
CONNECTOR	PLUG	Standard type R1B: DIN 5PIN for stock ; Other type available by customer requested								
	CABLE	Standard type UL2464 18AWG*3C 20AWG*2C shield wire *1C with 5fts length for stock ; Other type available by customer requested								
NOTE	<ol style="list-style-type: none"> 1.All parameters are specified at 230VAC input, rated load, 25°C 70% RH ambient. 2.DC voltage: The output voltage set at point measure by plug terminal & 50% load. 3.Ripple & noise are measured at 20MHz by using a 12" twisted pair terminated with a 0.1uf & 47uf capacitor. 4.Tolerance: includes set up tolerance, line regulation, load regulation. 5.Line regulation is measured from low line to high line at rated load. 6.Load regulation is measured from 20% to 100% rated load. 7.The power supply is considered a component which will be installed into a final equipment. The final equipment must be re-confirmed that it still meets EMC directives. 									

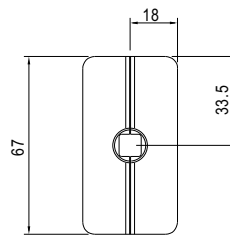
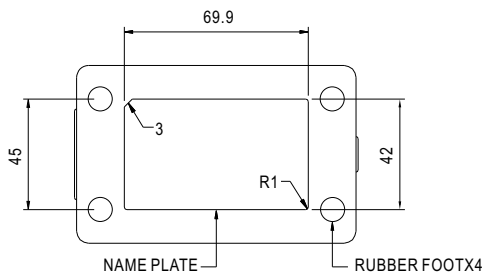
■ Mechanical Specification

Unit:mm



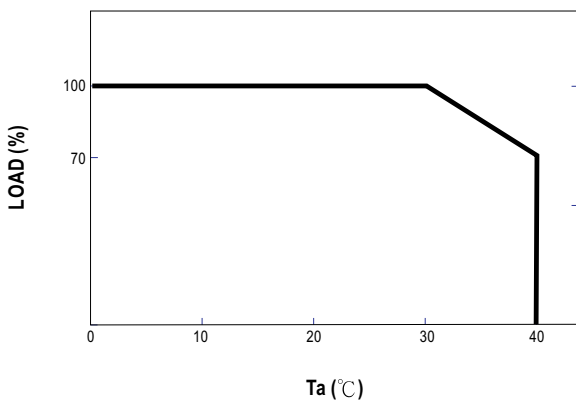
■ Plug Assignment

Standard plug: R1B (option)

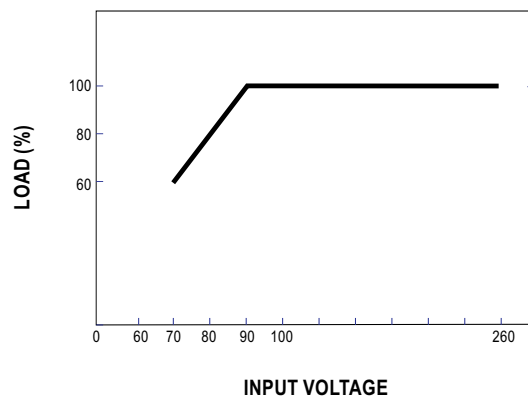


PIN NO	OUTPUT
1	COM
2	COM
3	+5VDC
4	-Vout
5	+Vout

■ Derating Curve



■ Static Characteristics



NO	TEST ITEM	TEST CONDITION / SPECIFICATION	RESULT	VERDICT																																																								
12	OVER LOAD PROTECTION	I/P : 230VAC O/P : TESTING SPEC : 150%~250%(Typ)	A:132% B:160% HICCUP MODE AUTO RECOVERY	P																																																								
13	OVER VOLTAGE PROTECTION	I/P : 230VAC O/P : TESTING SPEC : V1:110%~140%	A:116%(5.8V)	P																																																								
14	GROUND LEAKAGE CURRENT	I/P : 240VAC O/P : FULL LOAD SPEC : L-FG--<3.5mA N-FG--<3.5mA	A: L-FG : 1.0mA N-FG : 0.5mA	P																																																								
15	INSULATION RESISTANCE	SPEC : I/P-O/P 500VDC/10M Ohms MIN. I/P-FG 500VDC/10M Ohms MIN.	A: I/P-O/P >100M Ohms I/P-FG >100M Ohms	P																																																								
16	DIELECTRIC / WITHSTAND VOLTAGE	SPEC : I/P- O/P : 3000VAC/ 1 min. (10mA CUT-OFF) I/P- FG : 1500VAC/ 1 min. (10mA CUT-OFF)	A: I/P-O/P : 3.31mA I/P-FG : 3.38mA	P																																																								
17	BURNIN TEST	I/P : 230VAC O/P : FULL LOAD TA : 25°C BURN-IN DURATION : 4 hrs	A:NO BREAK B:NO BREAK	P																																																								
18	TEMPERATURE RISE T rise OF PARTS	<p style="text-align: center;">A: I/P : 230VAC AFTER 4 hrs BURN-IN O/P : FULL LOAD TA : 25°C</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th>POSITION</th> <th>P/N</th> <th>TEMP</th> <th>32°C (100% LOAD)</th> <th>40°C (70% LOAD)</th> </tr> </thead> <tbody> <tr> <td>D1</td> <td>BRIDGE DIODE</td> <td>86.2°C</td> <td>98.4°C</td> <td>88.6°C</td> </tr> <tr> <td>IC1</td> <td>MAIN TRANSISTOR</td> <td>106.2°C</td> <td>119.1°C</td> <td>108.0°C</td> </tr> <tr> <td>T1</td> <td>MAIN TRANSFORMER</td> <td>105.9°C</td> <td>118.0°C</td> <td>100.5°C</td> </tr> <tr> <td>D4</td> <td>O/P DIODE(+V1)</td> <td>99.0°C</td> <td>111.7°C</td> <td>95.3°C</td> </tr> <tr> <td>D5</td> <td>O/P DIODE(+V2)</td> <td>96.5°C</td> <td>108.6°C</td> <td>93.5°C</td> </tr> <tr> <td>IC4</td> <td>O/P REGULATION(-V3)</td> <td>88.8°C</td> <td>101.0°C</td> <td>87.9°C</td> </tr> <tr> <td>C10</td> <td>O/P FILTER CAPACITOR(+V1)</td> <td>96.0°C</td> <td>107.9°C</td> <td>93.1°C</td> </tr> <tr> <td>C22</td> <td>O/P FILTER CAPACITOR(+V2)</td> <td>84.3°C</td> <td>95.3°C</td> <td>84.4°C</td> </tr> <tr> <td>C24</td> <td>O/P FILTER CAPACITOR(-V3)</td> <td>78.0°C</td> <td>89.1°C</td> <td>80.4°C</td> </tr> <tr> <td>C3</td> <td>I/P FILTER CAPACITOR</td> <td>82.8°C</td> <td>95.2°C</td> <td>86.6°C</td> </tr> </tbody> </table>			POSITION	P/N	TEMP	32°C (100% LOAD)	40°C (70% LOAD)	D1	BRIDGE DIODE	86.2°C	98.4°C	88.6°C	IC1	MAIN TRANSISTOR	106.2°C	119.1°C	108.0°C	T1	MAIN TRANSFORMER	105.9°C	118.0°C	100.5°C	D4	O/P DIODE(+V1)	99.0°C	111.7°C	95.3°C	D5	O/P DIODE(+V2)	96.5°C	108.6°C	93.5°C	IC4	O/P REGULATION(-V3)	88.8°C	101.0°C	87.9°C	C10	O/P FILTER CAPACITOR(+V1)	96.0°C	107.9°C	93.1°C	C22	O/P FILTER CAPACITOR(+V2)	84.3°C	95.3°C	84.4°C	C24	O/P FILTER CAPACITOR(-V3)	78.0°C	89.1°C	80.4°C	C3	I/P FILTER CAPACITOR	82.8°C	95.2°C	86.6°C	P
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20	CONSTRUCTION INSPECTION (FOR QC INSPECTION REFERENCE ONLY)	<p>A: 1. PACKING : WHITE BOX 2. MARKING : MODEL LABEL CE,UL,CB,TUV MARK 3. TOPOLOGY : TOP SWITCH CIRCUIT 4. MECHANICAL : FULLY ENCLOSED PLASTIC CASE,O/P CABLE UL 5 PIN DIN 150CM</p>																																																										
21	CRITICAL COMPONENT RECORD (FOR QC INSPECTION REFERENCE ONLY)	<p>A: FUSE : T2A / 250V BRIDGE DIODE : KBP206G LINE FILTER : UU-10.5 TRANSFOMER : EF-25 POWER SWITCHER : TOP234Y OUTPUT DIODE : 16P04Q+31DQ06+L7912CV INPUT CAPACITOR : FuhYin 68uF/400V HFR 105°C 18*26 OUTPUT CAPACITOR : LTEC 2700uF/6.3V LZG(M) 105°C*2 10*23.5+330uF/25V LZG(M) 105°C 8.3*16+330uF/25V LZG(M) 105°C*3 8.3*16 P.C.B : CEM-1 1 OZ</p>																																																										
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2002.9.22		P25-13D P25-14E	PASS	T.K.CHENG	MAX LIN																																																							