

TECHNICAL DATASHEET

45W PD Adapter with inter-changeable AC plug

FSP045-D3MR3C



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FEATURES

- Meet USB PD R3.0 with PPS mode
- Certified IEC 62368-1
- Meet LPS
- Meet Energy Efficiency DOE Level VI
- Meet Code of Conduct Version 5 Tier 2
- **Over Current Protection**
- Over Voltage Protection
- **Short Circuit Protection**
- Over Temperature Protection

SAFETY STANDARD APPROVAL











DESCRIPTION

This product is an 45 watts AC to DC PD adapter intended for use in systems with Type-C input, such as laptop application. This adapter operates at 90 to 264 VAC input voltage with PD 3.0 standard outputs from 5V to 20V. The unit meets CIS-PR32 EN55032 CLASS B, and FCC PART 15B Class B emission limits, and is designed for ITE application.

INPUT SPECIFICATIONS

90-264 VAC Input voltage: Input frequency: 47-63 Hz

100Vac, 240Vac / full load ≤ 1.2A Input current:

No load power

consumption:

264Vac / 50Hz ≤ 0.25mA rms

115Vac. 230Vac ≤ 0.1W

Touch current:

GENERAL SPECIFICATIONS

Efficiency: See the chart at next page

Hold-up time ≥ 6ms at 100 or 240Vac with max. load

Operating altitude: 5.000 meters

Inrush current: No damage, I2T Shall be less than 29% of

the rating of adapter critical component

Class B conducted, class B radiated

Class B conducted, class B radiated

Class B conducted, class B radiated

MTBF: ≥ 30K Hrs with 115Vac / Max. load at 25°C

OUTPUT SPECIFICATIONS

Output voltage/current: See rating chart

Max. output power: 45W

Protection:

Over voltage: The adapter will shut down caused by in-

ternal fault. That will be return to normal

state by AC reset. See chart.

Over current: The power will shutdown without damage.

The power supply will enter into shut down Over Temperature:

while the abnormal thermal rise occurs.

Line flicker

EMC Performance

EN55032:

EN61000-3-3:

FCC:

VCCI:

EN61000-4-2: ESD, ±15 KV air & ±8 KV contact

EN61000-4-3: Radiated immunity, 3 V/m

FN61000-4-4: Fast transient / burst. ±1 KV

EN61000-4-5: Surge, ±1 KV diff., ±4 KV (Optional).

EN61000-4-6: Conducted immunity, 3 Vrms EN61000-4-8: Magnetic field immunity, 1A/m

EN61000-4-11: Voltage dip immunity, 30% reduction for 500

ms, >95% reduction for 10 ms, and 100%

reduction for 5000 ms

ENVIRONMENTAL SPECITICATIONS

0~70°C (> 40°C derating) Operating temperature:

Storage temperature: -20~+60°C

Operating humidity: 0~90% RH non-condensing Storage humidity: 0~90% RH non-condensing

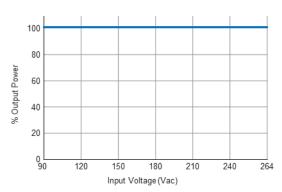


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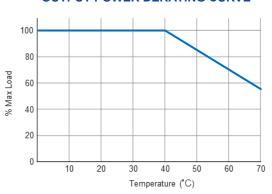
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INPUT VOLTAGE DERATING CURVE



OUTPUT POWER DERATING CURVE



OUTPUT VOLTAGE / CURRENT RATING CHART

| Model | Output Voltage | Output Current | AC Plug | Efficiency: DoE L6 & CoC V5 T2 | | Over Voltage |
|---------------|-------------------|-------------------|---------|--|---------------------------|------------------------------------|
| | | | | 115V | 230V | Protection |
| FSP045-D3MR3C | 5/9/12/15/20V | 3/3/3/3/2.25A | US | SPR Mode 5V: 81.39% 9V: 86.62% 12V: 87.40% 15V: 87.73% 20V: 87.54% | 9V: 87.30% 12V: 88.30% | 12V: 18.0V Max. 15V: 22.0V Max. |

MECHANICAL & AC CONNECTOR SPECIFICTIONS

