

# BM050S Universal 30-50 Watt Series

- 100-240 Vac Universal Input
- Meets "ENERGY STAR" Program Requirements
- Single Output to 30-50W
- Regulated Output with Low Ripple
- Meets Medical Safety Agency Requirements
- Impact Resistant Polycarbonate Enclosure
- Modified and Custom Designs Also Available
- Desktop Style


**RoHS**


| Model           | Output Voltage<br>DC (V) | Maximum<br>Current (A) | Maximum<br>Watts (W) | Ripple & Noise<br>Vp-p max. (mV) |
|-----------------|--------------------------|------------------------|----------------------|----------------------------------|
| BM050-S-05-X-XX | 5                        | 6.00                   | 30.0                 | 50                               |
| BM050-S-09-X-XX | 9                        | 5.00                   | 45.0                 | 90                               |
| BM050-S-12-X-XX | 12                       | 4.20                   | 50.4                 | 120                              |
| BM050-S-15-X-XX | 15                       | 3.36                   | 50.4                 | 150                              |
| BM050-S-18-X-XX | 18                       | 2.80                   | 50.4                 | 180                              |
| BM050-S-24-X-XX | 24                       | 2.10                   | 50.4                 | 240                              |
| BM050-S-48-X-XX | 48                       | 1.10                   | 52.8                 | 480                              |

## Input Specification

|                     |                                                |
|---------------------|------------------------------------------------|
| Input Voltage Range | 100 to 240VAC -10%, +10%                       |
| Line Frequency      | 47 to 63 Hz                                    |
| Input Current       | 1.5A max. at 90VAC Input                       |
| Protection          | Internal Primary Current Fuse, Inrush Limiting |

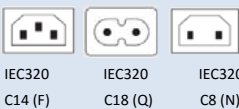
## Output Specification

|                        |                                |        |
|------------------------|--------------------------------|--------|
| Line & Load Regulation | Line Regulation                | +/- 1% |
| (at End of Cable)      | Load Regulation                | +/- 5% |
| Ripple & Noise         | 1% Vp-p max.                   |        |
| Transient Response     | 0.5ms for 50% Load change Typ. |        |
| Protection             | Over-current Protection        |        |
|                        | Over-voltage Protection (OVP)  |        |
|                        | Short Circuit Protection       |        |

## Environmental Specification

|                       |                                |
|-----------------------|--------------------------------|
| Operating Temperature | 0°C to 40°C with no derating   |
| Relative Humidity     | 5% to 95% non-condensing       |
| Altitude              | 0 - 16,000 feet                |
| Cooling               | Convectional - Non vented case |

## Input Configuration



IEC320 C14 (F) IEC320 C18 (Q) IEC320 C8 (N)

Specify the input configuration Code in your Order.

## General Specification

|                                |                                                                                   |
|--------------------------------|-----------------------------------------------------------------------------------|
| Topology                       | Switching - Fixed Frequency Flyback                                               |
| Leakage Current                | Less than 100uA                                                                   |
| Dielectric Withstand           | 4,500VAC Primary - Secondary<br>1,800VAC Primary - F.G<br>500VDC Secondary - F.G  |
| Storage Temperature            | -40 °C to 85 °C                                                                   |
| Efficiency                     | Minimum Average Efficiency in Active Mode<br>≥ 88%                                |
| Hold-up Time                   | 20ms min. @100VAC                                                                 |
| EMI                            | Complies with EMC Directives                                                      |
| Max. Power in No-Load          | ≤ 0.21W, 5V & 9V ≤ 0.1 @115VAC & 230VAC                                           |
| MTBF                           | 250,000 Calculated Hours Minimum.                                                 |
| Approvals and Safety Standards | UL60950-1, IEC/EN60950-1, K60950-1<br>EMC : EN55022 / 55024 / 61000               |
| Case and Dimension             | 4.20(L) x 2.60(W) x 1.46(H) [in]<br>107(L) x 66(W) x 37(H) [mm]                   |
| Case Material                  | Black 94V0 Polycarbonate                                                          |
| Cord and Connectors            | UL2464, 18 AWG, 4 Conductor, 1,500mm<br>Other cable and connectors are available. |

## Part Number Key

|                     |               |           |                     |
|---------------------|---------------|-----------|---------------------|
| <u>BM050</u>        | <u>S</u>      | <u>12</u> | <u>X</u>            |
| Product Family Name | Single Output | Volt (DC) | Input Configuration |