

BI050S Universal 30-50 Watt Series

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



Model	Output Voltage DC (V)	Maximum Current (A)	Maximum Watts (W)	Ripple & Noise Vp-p max. (mV)
BI050-S-05-X-XX	5	6.00	30.0	50
BI050-S-09-X-XX	9	5.00	45.0	90
BI050-S-12-X-XX	12	4.20	50.4	120
BI050-S-15-X-XX	15	3.36	50.4	150
BI050-S-18-X-XX	18	2.80	50.4	180
BI050-S-24-X-XX	24	2.10	50.4	240
BI050-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 (at End of Cable)	Line Regulation	+/- 1%
	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	Convectonal - Non vented case

Input Configuration



IEC320 C14 (F)	IEC320 C8 (N)	IEC320 C18 (Q)
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Specify the input configuration Code in your Order.

General Specification

Topology	Switching - Fixed Frequency Flyback
Leakage Current	Less than 250uA
Dielectric Withstand	3,000VAC Primary - Secondary
	1,800VAC Primary - F.G
	500VDC Secondary - F.G
Storage Temperature	-40 °C to 85 °C
Efficiency	Minimum Average Efficiency in Active Mode ≥ 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 EMC : EN55022 / 55024 / 61000
Case and Dimension	4.20(L) x 2.60(W) x 1.46(H) [in] 107(L) x 66(W) x 37(H) [mm]
Case Material	Black 94V0 Polycarbonate
Cord and Connectors	UL2464, 18 AWG, 4 Conductor, 1,500mm Other cable and connectors are available.

Part Number Key

<u>BI050</u>	<u>S</u>	<u>12</u>	<u>X</u>
Product Family Name	Single Output	Volt (DC)	Input Configuration