

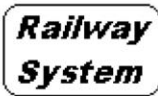


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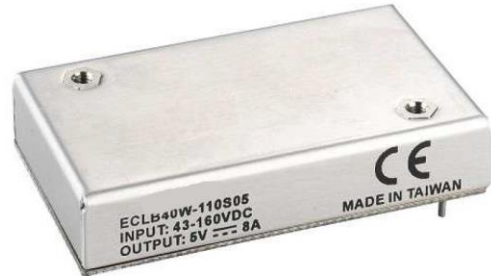
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40W Module DC to Dc power supply > ECLB40W-110



FEATURES

- * 40W Isolated Output
- * Efficiency to 91%
- * 2.05" X1.2" X0.4" Six-Sided Shield Metal Case
- * 4:1 Input Range
- * Regulated Outputs
- * Fixed Switching Frequency
- * Input Under Voltage Protection
- * Over Current Protection
- * Remote On/Off
- * Low No Load Power Consumption
- * Continuous Short Circuit Protection
- * No Tantalum Capacitor Inside
- * UL60950-1 2nd (Basic Insulation) Approval
- * Meets EN50155 with External Circuits
- * Fire & Smoke Meets EN45545-2
- * 3000m Operating Altitude
- * Full Load Operation Up to 69°C with Heat-Sink M-C655 Natural Convection
- * Safety Meets IEC/EN/UL 62368-1



MODEL NUMBER	INPUT VOLTAGE	OUTPUT VOLTAGE	OUTPUT CURRENT		INPUT CURRENT		% EFF.	CAPACITOR LOAD MAX.
			MIN.	MAX.	NO LOAD	FULL LOAD		
ECLB40W-110S33	43-160 VDC	3.3 VDC	0 mA	10000 mA	6 mA	340 mA	88%	10000µF
ECLB40W-110S05	43-160 VDC	5 VDC	0 mA	8000 mA	6 mA	409 mA	88.5%	8000µF
ECLB40W-110S12	43-160 VDC	12 VDC	0 mA	3333 mA	6 mA	404 mA	90%	3300µF
ECLB40W-110S15	43-160 VDC	15 VDC	0 mA	2666 mA	6 mA	399 mA	91%	2700µF
ECLB40W-110D12	43-160 VDC	±12 VDC	0 mA	±1667 mA	6 mA	408 mA	88%	1650µF
ECLB40W-110D15	43-160 VDC	±15 VDC	0 mA	±1333 mA	6 mA	408 mA	88.5%	1350µF
ECLB40W-110D24	43-160 VDC	±24 VDC	0 mA	±833 mA	6 mA	408 mA	89%	850µF

NOTE:

1. Nominal Input Voltage 110 VDC



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SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

Input Voltage Range 110V 43-160V
 Input Surge Voltage (100ms max.) 200Vdc max.
 Under Voltage Lockout power up 40V
 power down 38V
 Positive Logic Remote On/Off (note4&5)
 Input Filter Pi Type

OUTPUT SPECIFICATIONS:

Voltage Accuracy ±1.5% max.
 Voltage Balance (Dual Output) ±1.0% max.
 Transient Response: 25% Step Load Change
 Error Band ±5% Vout Nominal Recovery Time <250µs
 External Trim Adj. Range (Single Output Models Only) ±10%
 Ripple & Noise, 20MHz BW (Measured with 1µF MLCC)
 Vo= 3.3V&5V 100mV pk-pk max
 Vo=12V, 15V, ±12V& ±15V 150mV pk-pk max.
 Vo=±24V 200mV pk-pk max.
 Temperature Coefficient ±0.02%/°C max.
 Short Circuit Protection Continuous
 Line Regulation (note1) ±0.2% max.
 Load Regulation (note2) Single ±0.5% max.
 Dual ±1.0% max.
 Cross Regulation (Dual output) Load Cross Variation 10%/100% ±5.0% max.
 Over Voltage Protection Zener or TVS Clamp
 Current Limit 110%-170% Nominal Output
 Start up Time 15ms typ.

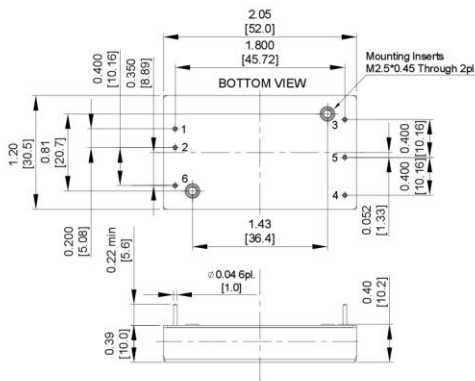
GENERAL SPECIFICATIONS:

Efficiency See Table
 Isolation Voltage Input/Output 3000VDC min.
 Input/Case, Output/Case 1600VDC min.
 Isolation Resistance 10⁹ Ohms min.
 Isolation Capacitance 1500pF typ.
 Case grounding Output/case 1000pF typ.
 Switching Frequency 250KHz typ.
 EMI/RFI Six-Sided Continuous Shield
 Operating Ambient Temperature Range -40°C to +85°C
 De-rating: Above 45°C Linearly to Zero Power at +105°C
 Case Temperature (note5) 105°C max.
 Cooling Natural Convection
 Storage Temperature Range -55°C to +125°C
 Thermal Shutdown, Case Temp. 110°C typ.
 Humidity 95% RH max. Non-Condensing
 MTBF MIL-HDBK-217F. GB. 25°C. Full Load 905Khrs typ.
 Safety Meet UL60950-1 2nd (Basic Insulation)
 EMC(note6) Meet EN50155(EN50121-3-2) with External Filter
 Shock/Vibration Meet EN50155(EN61373)
 Dimensions 2.05x1.20x0.40inches (52x30.5x10.2mm)
 Case Material Aluminum with Non-Conductive Base
 Weight 36g

NOTE:

1. Measured from high line to low line.
2. Measured from full load to min. load.
3. Logic Compatibility ... CMOS or open collector TTL, referenced to -Vin.
 Module on >3.5VDC to 75VDC or open circuit
 Module off 0 to <1.2VDC
4. Suffix "N" to the model number with negative logic remote on/off
 Module on 0 to < 1.2 VDC
 Module off >3.5VDC to 75VDC or open circuit
5. Maximum case temperature under any operating condition should not be Exceeded 105°C.
6. For information about EN50155 and RIA12, refer to application note.

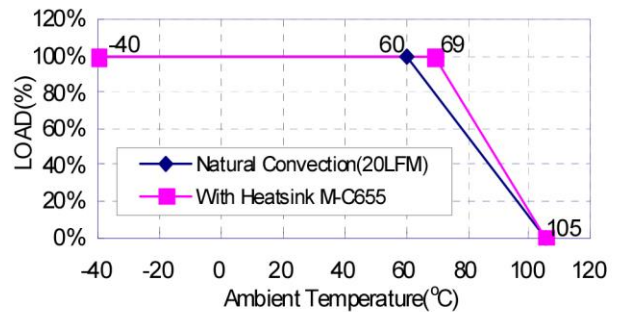
SIZE LB Dimensions:



PIN CONNECTION		
PIN	Single Output	Dual Output
1	+V Input	+V Input
2	-V Input	-V Input
3	+V Output	+V Output
4	Trim	-V Output
5	-V Output	Common
6	Remote On/Off	

NOTE: Pin Size is 0.04x0.004 Inch (1.030.1 mm)DIA
 All Dimensions in Inches/mm
 Tolerance Inches:xxxxx=±0.02 ,xxxxx=±0.010
 Millimeters:xxxx=±0.5 ,xxxx=±0.25

ECLB40W-110S15 Typical Derating Curve



External Output Trimming

