

Model 848 Solid State DC Flasher

Description

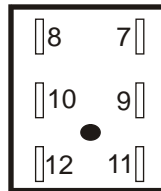
The model 848 DC Flasher is a solid-state device intended to connect a DC supply voltage to traffic signal loads in a flashing mode. The unit has two independent output channels that provide a high-side switching function to the loads. The flasher is designed such that Load Circuit #1 will be On when Load Circuit #2 is Off, and vice versa. Each output circuit is protected from over-current and short circuit faults. Output circuits are also protected from transient over-voltage by a clamp circuit.

Specifications

Output Supply working voltage (pin #12)	48.0 Vdc
Output Supply voltage maximum (pin #12).....	53.0 Vdc
Output Supply voltage minimum (pin #12).....	10.0 Vdc
Quiescent Output Supply current maximum (Output Supply = 48 Vdc, no loads).....	30 mAdc
Output Load current maximum (per output)	15 Adc
Output Load current minimum (per output)	1 mAdc
Output Load Surge current maximum (per output, 10 ms duration, incandescent load)	50 Adc
Output Clamp voltage	55 Vdc
Output Clamp dissipation (1 ms duration).....	1500 watts
Short Circuit duration	Continuous
Output Off-state Leakage current.....	500 uA maximum
Flashing Frequency.....	55 ±5 flashes/minute
Duty Cycle	50 ±5 %
Flash Overlap maximum.....	5 ms
Operating Temperature (still air)	-34°C to +74°C
Dimensions (length)	8.025 inches
(height)	4.170 inches
(Width).....	1.475 inches

Pin Assignments

Pin #	Function
7	Load Circuit #1
8	Load Circuit #2
9	Earth Ground
10	Output Ground
11	No Connection
12	Output Supply



Viewed Connector End

Connector

The model 848 DC Flasher uses the same plug as a current NEMA / Type 170 dual circuit flasher and mates with the Beau-Vernitron type socket S-5406 or Cinch-Jones socket S-406-SB or equivalent. The Output Supply has been assigned to pin #12 which is a "no connection" pin on a NEMA AC Flasher (AC Line pin #11 is not used).

Output Current Limit

Each Load Circuit output (pin #7,8) is internally limited to approximately 15 Amps, such that each output is independently over-current and short circuit protected. When the maximum output current level from pin #7 or pin #8 is exceeded, the output switch is turned off. The switch remains off for approximately 650 ms and then automatically attempts to restart. If the fault is still present, this cycle repeats until the fault is removed, thus protecting the output switch. During a short circuit fault condition, currents exceeding 75 to 100 amps may flow through the switch for approximately 1 ms. The magnitude of this short circuit fault current is dependent on the source impedance of the output supply and associated wiring.

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EBERLE DESIGN INC.

3510 East Atlanta Avenue Tel (480) 968-6407
Phoenix, AZ 85040 USA Fax (602) 437-1996
www.EDIttraffic.com

