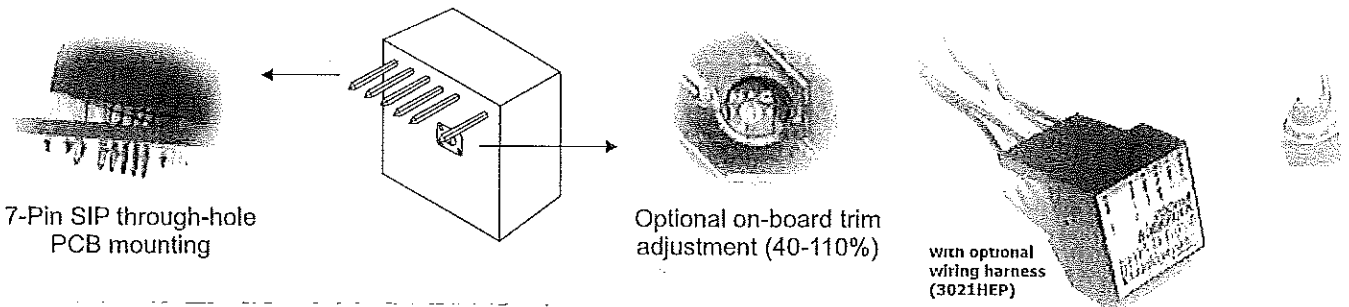


Features

- AC or DC input power up to 32V (24V_{rms}AC)
- 350mA, 500mA, 700mA, or 1.0A constant current output*
- Extremely small form factor[†] (0.83"x0.83"x0.43")
- Simple 7-pin SIP connection for through-hole PCB mounting or use with optional wiring harness
- External analog/digital intensity control (TTL compatible)
- Optional external potentiometer intensity control (0-100%)
- Optional on-board trim adjustment (40-110%)
- Output short circuit protection up to 15 seconds
- Output open circuit protection
- Pulse and strobe capable (control input)
- Built-in 5V reference/output to power logic circuitry or μ Processor

Typical Applications

- Solar & Landscape Lighting
- Architectural Lighting
- Track Lighting
- Automotive & Marine Lighting
- Portable Lighting & Flashlights
- Point of Purchase Lighting
- Desk & Reading Lamps
- Signal & marker Lighting
- Flashing & Strobe Lighting
- Cabinet & Display Case Lighting
- Sign & Channel Letters
- Much More...



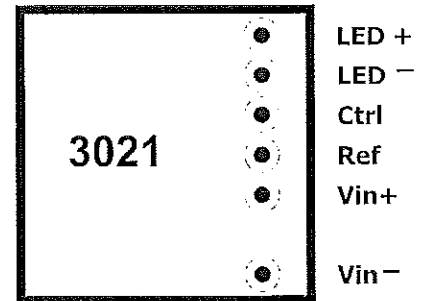
Absolute Maximum Ratings

Input Voltage, DC Model.	32V
Input Voltage, AC Model	24V _{rms}
Output Voltage (DC model).	32V
Control Pin Voltage	10V
Reference regulator current (5V _{DC})	20mA

Typical Characteristics

Output tolerance (within specified temp. range)	$\pm 5\%$
Efficiency	95%
Input Voltage Minimum	5V _{DC} 7V _{rms}
Input Margin (350mA unit ¹ , add to LED Vf MAX)	2V _{DC} 4V _{rms}

PINOUT



Bottom View

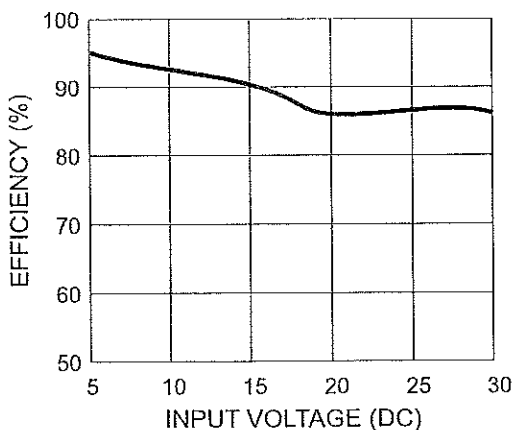


Figure 1.
Efficiency vs. Vin

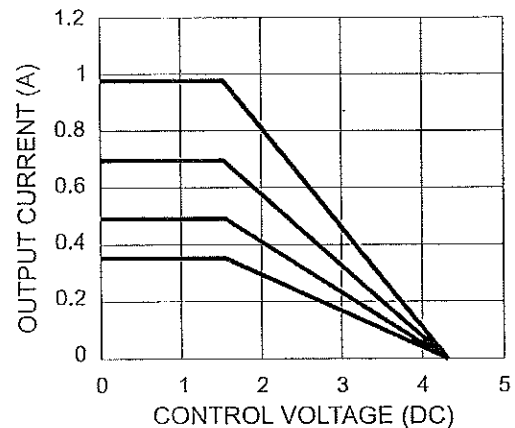


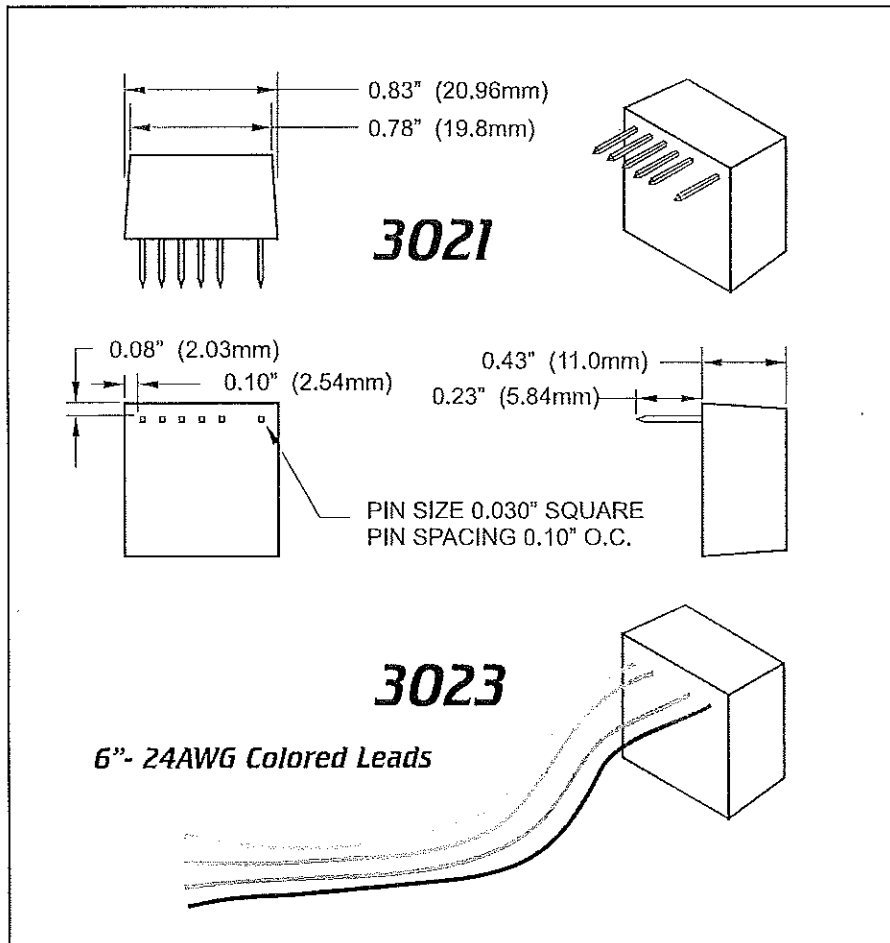
Figure 2.
Output current vs. control voltage

¹ - There is an efficiency penalty for powering an AC device with DC (vs. a DC-only module).
¹ - Margin increases with higher current units.

Specifications

Output current, 3021-x-x-350	350mA ²
Output current, 3021-x-x-500	500mA ²
Output current, 3021-x-x-700	700mA ²
Output current, 3021-x-x-1000	1000mA ²
Control Pin, adjustment threshold	1.65 V ±5%
Control Pin, shutoff threshold	4.2 V ±5%
Control Pin, on time	15 μs
Control Pin, off time	15 μs
Control Pin, input impedance	1k ohm
Reference voltage	5 V _{dc} ±5% ³
Optional trim pot adjustment range	40%-110% ³
External pot adjustment range	0%-100% ³
Maximum flash frequency	10 kHz
Minimum strobe pulse width	50 μs
Strobe turn-on / turn-off time	<25 μs
Quiescent current (no load or control pin high)	<500 μA
Operating temperature	-40-+85°C
Storage temperature	-40-+125°C

Physical Dimensions



Shown approximately actual size