



SnapBrite™ – S040U3W-12V

Data Sheet

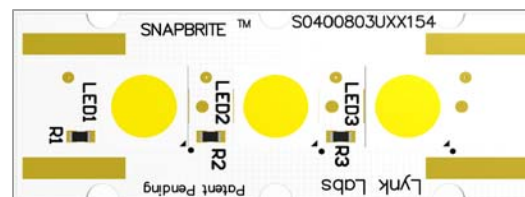
S040U3WXXK-12

3W 12V AC-LED

The SnapBrite™ S040U3WXXK-12V AC LED Assembly delivers 129-180 “hot” operating lumens based on CCT and CRI at 70° C Tj. Parallel circuits within the assembly provide maximum end product reliability. Each assembly is dimmable and can be powered direct with 12V AC magnetic or electronic transformers. For maximum performance in non-retrofit applications, Lynk Labs BriteDriver® power supply is recommended.

Applications:

- **Step Lights**
- **Accent Lights**
- **Under Cabinet Lights**
- **Garden Lights**
- **Display Lights**
- **Plant Growth Lights**
- **Aquatic Lights**



Benefits:

- **Significant Energy Savings – Uses up to ten times less power!**
- **Compatible with existing 12V AC Power Supplies – Plug & Play!**
- **Dimmable – Works with most existing AC Dimmers!**
- **Durable Light Source!**
- **Long Operating Life – 50,000 hours if used as specified!**





- **Electro-Optical Characteristics**

Model Number	CCT	VAC	Power	Lumen	lm/W
S040U3W27K-12	2700K	12 VAC Maximum	3 Watt	129	43
S040U3W30K-12	3000K	12 VAC Maximum	3 Watt	150	50
S040U3W40K-12	4000K	12 VAC Maximum	3 Watt	165	55
S040U3W50K-12	5000K	12 VAC Maximum	3 Watt	180	60

Note:

Lynk Labs lm/W is based on product level operating lumens - **“HOT”** lm/W powered with 12 VAC max at $T_a = 25^{\circ}\text{C}$ & $T_j = 70^{\circ}\text{C}$. Die Efficacy is 80-90 lm/W based on instantaneous DC voltage **“COLD”** lm/W per individual die at $T_j = 25^{\circ}\text{C}$. Lynk Labs AC LED are integrated circuits that include part of the drive circuitry and so eliminate on board driver efficacy losses.

- **Operating Characteristics (single assembly)**

Characteristic	S040U3WXXK-12
Drive Voltage	Minimum = 7.5 VAC, Maximum = 12.0 VAC
Thermal Management	T-Junction Maximum = 70°C
Viewing Angle	140°
CCT Options (W-C)	2700 - 8000K per ANSI_NEMA_ANSLG C78.377-2008
CRI Options (W-C)	Standard = 80, High = 92

- **Powering Specifications**

Power Supply/Driver	Output RMS	Frequency	Minimum Load	Dimming
BriteDriver®	12 VAC	44 kHz	1 Watt	Input
12 VAC Magnetic	12 VAC	50/60 Hz	5 Watt	Input

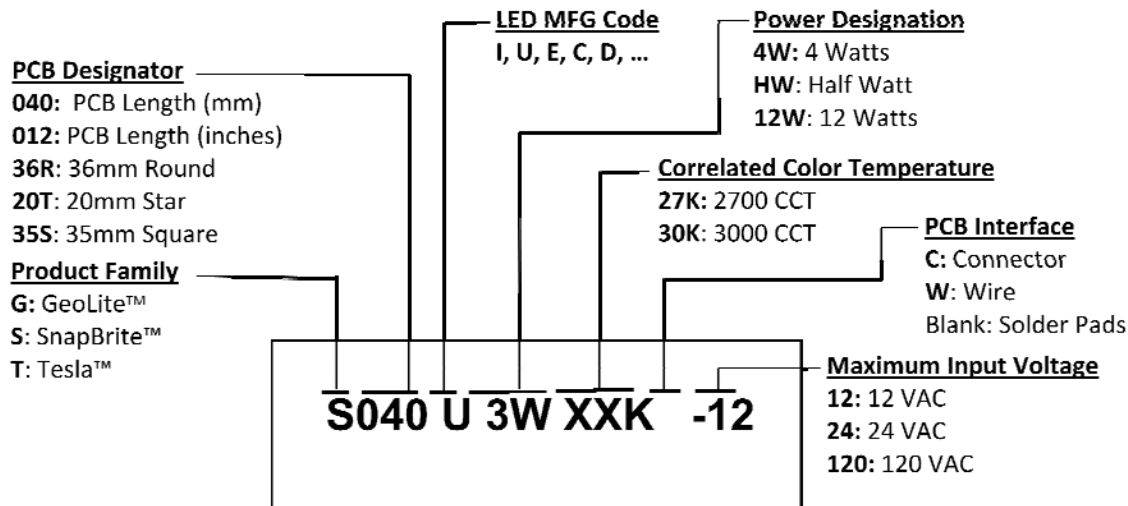
Warning – Do Not Power LED Assembly with More Than 12V AC. Use only with Lynk Labs' BriteDriver® AC LED Power Supplies or other approved transformers. Any Exceptions Void all warranties. Contact Lynk Labs for details and approvals.

- **Dimensions – Single LED Assembly**

S040U3WXXK-12	Length	Width	Height
Size in Millimeters	40 mm	15 mm	2 mm
Tolerance	+/- 0.254mm	+/- 0.254mm	+/- 10%



- **Model Numbering Description**



- **Design Considerations/Specifications**

1. Thermal Management Requirements

- Heat Sink Required (22 square cm/watt surface area)
- Thermal epoxy – No mechanical mounting required
- Thermal tape – No mechanical mounting required
- Thermal grease – Mechanical mounting required

2. Mechanical Mounting

- Use nylon washers for all mounting holes when using screws.
- Do not put force on LEDs.
- Do not bend PCB.

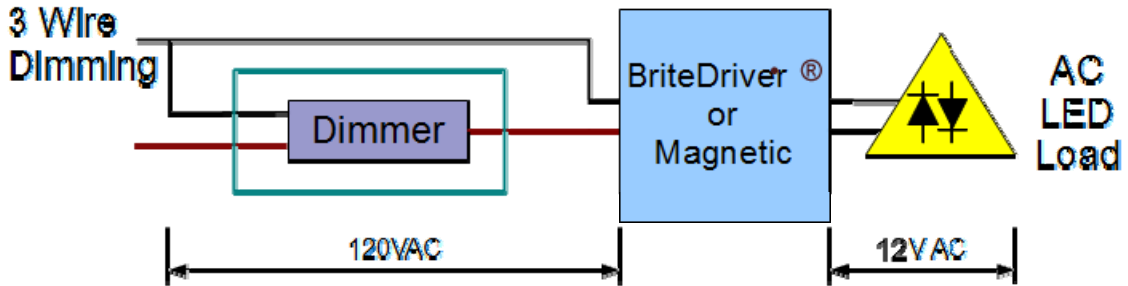
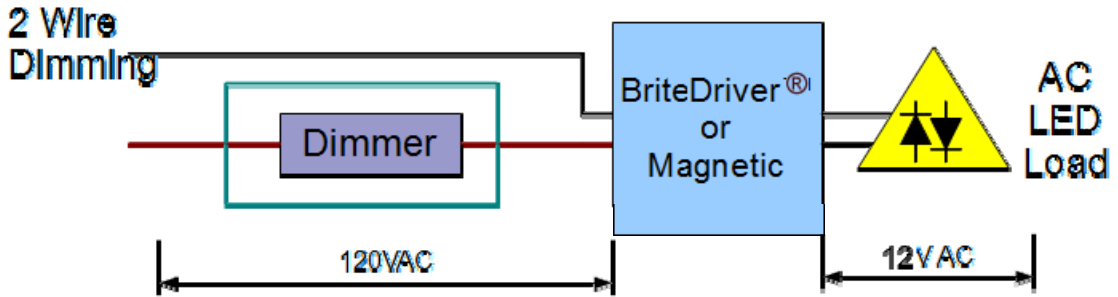
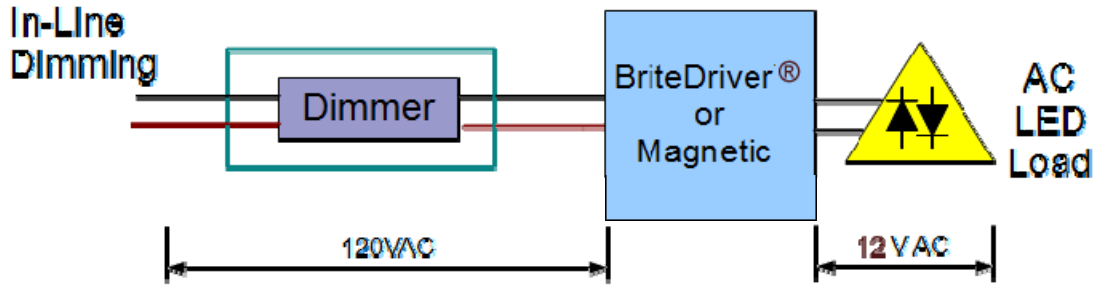
3. Electrical Interface

- Solder Pads
- 18-22 AWG Stranded wire
- Strain relief required





• Typical Dimmer Configurations



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- For SnapBrite™ Pricing, Availability and Ordering information, contact:



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