

# Brilliance by design

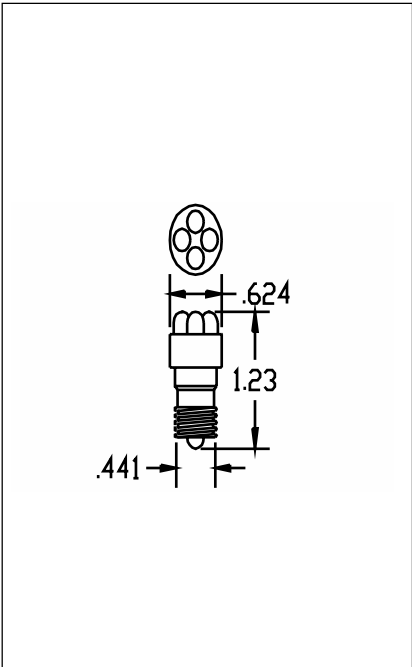
## LED Replacement for Incandescent Lamps

### MODEL 160

Model 160 screw base, 162 double contact bayonet base, and 164 single contact bayonet LED clusters. Candelabra incandescent replacement 4 LED cluster. All models are dual polarity which accommodates positive center, negative center and AC applications.

#### FEATURES

- Available in all colors and voltages
- Long life LEDs
- Low power consumption
- Direct replacement for: 3S3 and 6S6 incandescent lamps



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### HOW TO ORDER

160 S6 Screw Base		162 Double Contact Bayonet		164 Single Contact Bayonet	
Voltage	Model No.	Voltage	Model No.	Voltage	Model No.
12V	160-12X	12V	162-12X	12V	164-12X
24V	160-24X	24V	162-24X	24V	164-24X
28V	160-28X	28V	162-28X	28V	164-28X
48V	160-48X	48V	162-48X	48V	164-48X
60V	160-60X	60V	162-60X	60V	164-60X
120V	160-120X	120V	162-120X	120V	164-120X

Where the 'X' appears insert: 1-Red, 2-Green, 3-Yellow, 4-Amber, 5-Ultra Green, 6-Ultra Blue, 7-Pure White

NOTE:

\*For voltage/current specs, see page 7-9

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### LED Replacements for Incandescent Lamps

#### LED Specifications and Technical Data

LED data for models 160, 162, 164, 460, 510, 516, 522, 532, 513, 541

Color Choice	LED Size	Raw Chip Material	Emitted Color	Wave Length	Viewing Angle (Deg.)	Iv (mcd) Typical	If (mA) Typical	Vf (V) Typical
1	T 1-3/4	GaAlAs	Red	660	22	3000-4000	20	2.1
2	T 1-3/4	Gap	Green	565	20	750	20	1.8
3	T 1-3/4	AllnGap	Yellow	595	22	2000-3000	25	2.1
4	T 1-3/4	AllnGap	Amber	611	22	2000-3000	25	2.1
5	T 1-3/4	InGaN	Ultra Green	575	30	2200	25	3.5
6	T 1-3/4	InGaN	Blue	470	30	500	25	3.5
7	T 1-3/4	InGaN/ YAG	Pure White		45	1200	25	3.5

LED data for models 159, 197, 311

Color Choice	LED Size	Raw Chip Material	Emitted Color	Wave Length	Viewing Angle (Deg.)	Iv (mcd) Typical	If (mA) Typical	Vf (V) Typical
1	T-1	GaAlAs	Red	660	30	1250	20	1.8
2	T-1	Gap	Green	568	20	500	20	1.8
3	T-1	AllnGap	Yellow	595	30	500	25	2.1
4	T-1	AllnGap	Amber	611	30	500	25	2.1
5	T-1	InGaN	Ultra Green	575	30	1700	25	3.5
6	T-1	InGaN	Blue	470	30	650	25	3.5
7	T-1	InGaN/ YAG	Pure White		45	630	25	3.5

Note: The specifications listed above are subject to change. For special LED requirements and color please contact SloanLED.