

# Fluorescent Miniature

## T2 Fluorescent Lamps



- Compact, high lumen output design
  - T2 lamps, 7 mm diameter
  - High lumen output compared to older style T5 preheat lamps
- Tri-phosphor coatings for high CRI
  - 3000K, 3500K, 4100K
  - 80 CRI
- 90% lumen maintenance
- Longer life than T5 preheat lamps
  - 10,000 hours
- Four wattages and lengths
  - 6W/8.6", 8W/12.6", 11W/16.6", 13W/ 20.6"
- Axial base
  - Quick connection, positive retention
  - Low profile
- Lightweight, low-profile fixture designs
- QUICKTRONIC® FM ballast operates all wattages

**SYLVANIA Fluorescent Miniature T2 lamps with a 7mm bulb diameter and axial base design allow for new, lightweight, low profile, space-saving fixture designs with high efficiency.**

Pure tri-phosphor coatings providing 3000K, 3500K or 4100K color temperature with a color rendering index of 80 provide the right color of light and excellent color rendition to blend with incandescent and tungsten halogen sources or backlighted displays. The lumen outputs are higher and the 10,000 hour average rated lamp life is longer than that of T5 preheat lamps of the same wattages and similar lengths.

### Product Availability

Lamp Type	Color Temp.	Lumens	Length
FM6/830	3000K	330	8.6"
FM8/830	3000K	540	12.6"
FM11/830	3000K	750	16.6"
FM13/830	3000K	930	20.6"
FM6/835	3500K	330	8.6"
FM8/835	3500K	540	12.6"
FM11/835	3500K	750	16.6"
FM13/835	3500K	930	20.6"
FM6/841	4100K	330	8.6"
FM8/841	4100K	540	12.6"
FM11/841	4100K	750	16.6"
FM13/841	4100K	930	20.6"

### System Comparison

Lamp Type	Watts	Life (hrs.)	Nominal Length	Lumens	Color Temp.	CRI
F6T5/CW	6	7500	9.0"	270	4200K	62
FM6/841	6	10,000	8.6"	330	4100K	80
F8T5/CW	8	7500	12.0"	390	4200K	62
FM8/841	8	10,000	12.6"	540	4100K	80
F13T5/CW	13	7500	21.0"	860	4200K	62
FM13/841	13	10,000	20.6"	930	4100K	80

### Application Information

#### Applications

Showcase lighting  
Undercounter/shelf lighting, backlight for displays  
Task lighting  
Step lights

#### Application Notes

1. Use only electronic ballasts with end-of-lamp life sensing circuits.
2. T2 lamps operate at higher surface temperatures than typical fluorescent lamps. Do not touch lamps during operation.
3. Turn off electrical power before removing or installing the lamps.

### Sample Specification

Lamps shall be SYLVANIA Fluorescent Miniature (FM6, FM8, FM11, FM13) having a 7mm, T2, diameter bulb and axial bases. The lamps shall have a correlated color temperature of (3000K, 3500K and 4100K) with a color rendering index of 80. Lamp length shall be (218mm, 320mm, 422mm, 523mm). Lamps shall be operated only on electronic ballasts, which have been specifically designed to operate Fluorescent Miniature lamps and to reliably and safely control all operating modes including end-of-lamp life. The electronic ballast shall operate the lamps in the (programmed rapid start, preheat start, instant start) mode.

### Warranty Information

#### QUICK 60+® warranty for SYLVANIA lamp and ballast combination

Limited 6 month lamp warranty and a 24 month ballast warranty is possible if both lamps and ballast are provided by OSRAM SYLVANIA. See the QUICK 60+ warranty for details and restrictions.

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## Ordering and Specification Information

Item Number	Ordering Abbreviation	Watts	Volts	Color Temp.	Lumens	Nominal Length mm (in.)	Avg. Rated Life (hrs.)
26204	FM6/830	6	47	3000	330	218.3 (8.6)	10,000
26237	FM8/830	8	70	3000	540	319.9 (12.6)	10,000
26239	FM11/830	11	94	3000	750	421.5 (16.6)	10,000
26253	FM13/830	13	115	3000	930	523.1 (20.6)	10,000
26233	FM6/835	6	47	3500	330	218.3 (8.6)	10,000
26234	FM8/835	8	70	3500	540	319.9 (12.6)	10,000
26235	FM11/835	11	94	3500	750	421.5 (16.6)	10,000
26291	FM13/835	13	115	3500	930	523.1 (20.6)	10,000
26213	FM6/841	6	47	4100	330	218.3 (8.6)	10,000
26232	FM8/841	8	70	4100	540	319.9 (12.6)	10,000
26231	FM11/841	11	94	4100	750	421.5 (16.6)	10,000
26230	FM13/841	13	115	4100	930	523.1 (20.6)	10,000

### Dimensions

Lamp Type	(A) MOL [mm (in)]	(B) Lighted Length [mm (in)]	(C) Base Length [mm (in)]	(D) Bulb Diameter [mm (in)]
FM6	218.3 (8.6)	180 (7.09)	≤ 18.0 (.71)	7 (.276)
FM8	319.9 (12.6)	282 (11.10)	≤ 18.0 (.71)	7 (.276)
FM11	421.5 (16.6)	384 (15.12)	≤ 18.0 (.71)	7 (.276)
FM13	523.1 (20.6)	485 (19.10)	≤ 18.0 (.71)	7 (.276)

### Ordering Guide

FM	8	/	8	30
Fluorescent	Wattage:		8 = 80 CRI	30 = 3000K
Miniature	6, 8, 11, 13			35 = 3500K
				41 = 4100K

### Technical Information

Use ONLY with electronic ballasts which have been specifically designed to operate Fluorescent Miniature lamps and to reliably and safely control all lamp operating modes including end-of-lamp life sensing. If a non-conforming ballast is used, very high temperatures (350°C typical) may be generated at the ends of the lamp especially during end-of-life operation, causing the lamp to crack and resulting in potential fire, electrical shock or burn hazards.

Due to their small diameter, Fluorescent Miniature fluorescent lamps operate at higher surface temperatures than other fluorescent lamps. To avoid possible burns, do not touch the lamp during operation and allow sufficient cooling time before removing the lamp from the fixture.

The typical bulb wall temperature during operation is 120°C at the ends. The maximum allowable bulb wall and base temperature is 150°C.

To avoid electrical shock, turn electrical power off before removing or installing the lamp.