



Endicott Research Group, Inc.

2601 Wayne St., Endicott, NY 13760  
607-754-9187 Fax 607-754-9255  
http://www.ergpower.com

# SFS4276F



## Specifications and Applications Information

06/27/13

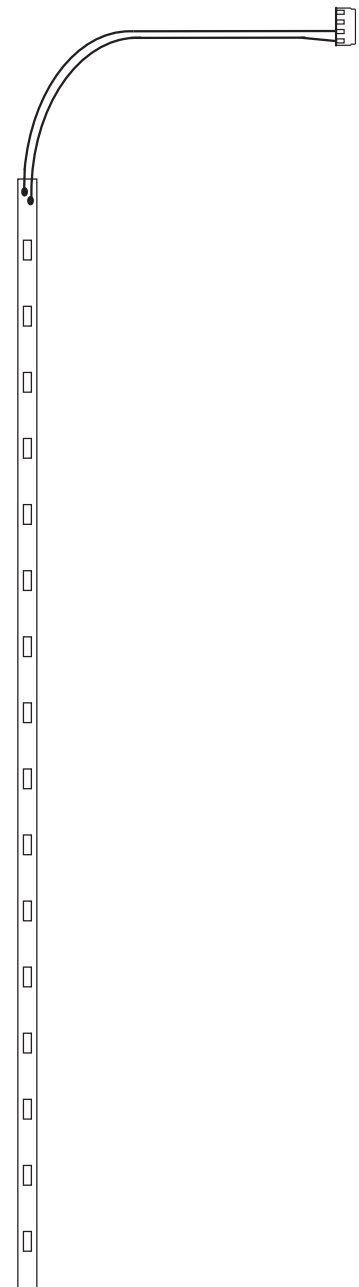
## LED Backlight Unit

The ERG SFS4276F LED backlight unit is specifically designed for applications which require wide dimming and LCD brightness stability. The SFS4276F is designed for the Kyocera TVL-55728D070J-LW-I-AAN backlight.

Designed, manufactured and supported within the USA, the SFS4276F features:

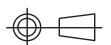
- ✓ Custom LED stick for Customer supplied rail
- ✓ High dimming ratio
- ✓ One year warranty

### Package Configuration



Components are shown for reference only. Actual product may differ from that shown.

Connector
<b>Input Connector</b>
Molex 51021-0400
J1-1 N/C J1-2 N/C J1-3 Cathode 1 J1-4 Anode 1



**Absolute Maximum Ratings**

Rating	Symbol	Value	Units
Forward Current <sup>(1)</sup>	$I_F$	200	mA
Component Surface Temperature	$T_s$	-40 to +100	°C
Storage Temperature	$T_{stg}$	-40 to +100	°C

**Maximum Recommended Operating Conditions <sup>(2)</sup>**

Rating	Symbol	Value	Units
Forward Current <sup>(3)</sup>	$I_F$	150	mA
Component Surface Temperature	$T_s$	-40 to +95	°C

**Electrical Characteristics**

Unless otherwise noted  $I_F = 100$  mA dc and  $T_a = 25^\circ\text{C}$

Characteristic	Symbol	Min	Typ	Max	Units
Number of Strings	-	-	1	-	-
LED Forward Voltage	$V_F$	2.7	3.0	3.4	V
String voltage	$V_S$	43.2	48.0	54.4	V

Specifications subject to change without notice.

- (1) Current is specified per string.
- (2) Operation above maximum recommended operating conditions will require additional thermal management actions and will decrease LED lifetime.
- (3) Strings are to be driven with a current source.
- (4) Forward voltage has a tolerance of  $\pm 0.05\text{V}$ .



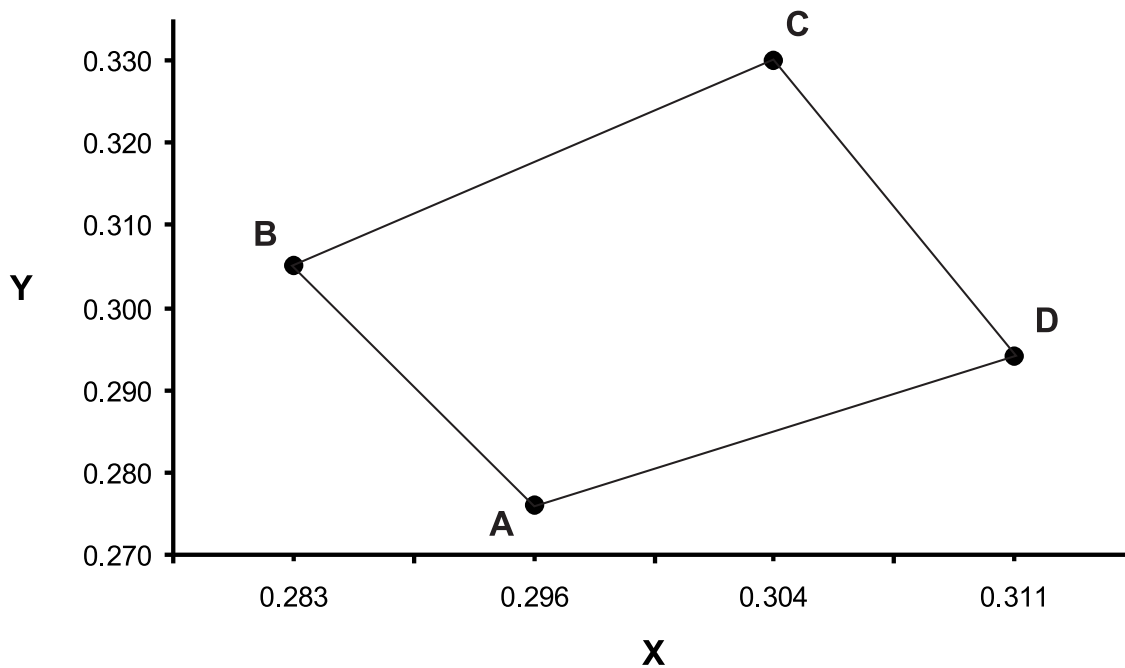
## Backlight Chromaticity Coordinate Boundaries <sup>(1)</sup>

(Ta = 25°C)

	A	B	C	D
X	0.296	0.283	0.304	0.311
Y	0.276	0.305	0.330	0.294

(1) Each column (A, B, C and D) represents an X,Y coordinate on the CIE 1931 chromaticity diagram.

CIE 1931 CHROMATICITY DIAGRAM



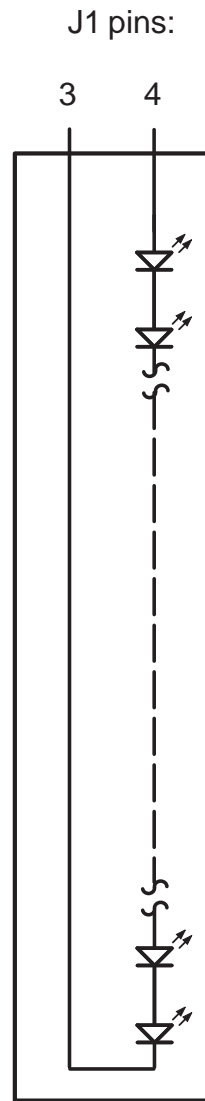


Figure 1  
SFR Connectivity



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