



Endicott Research Group, Inc.

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# SFS4294F



## Specifications and Applications Information

08/26/13

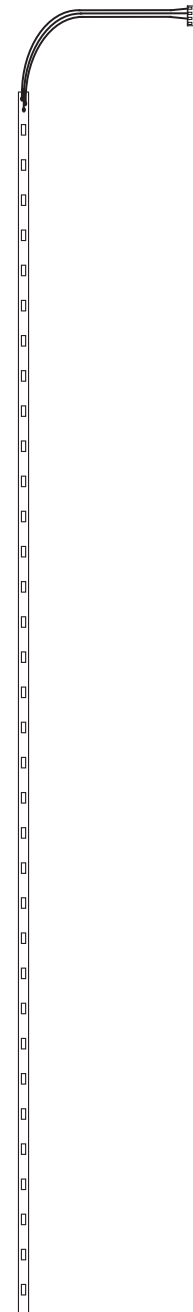
## LED Backlight Unit

The ERG SFS4294F LED backlight unit is specifically designed for applications which require wide dimming and LCD brightness stability. The SFS4294F is designed as an ERG generic backlight for 15" displays.

Designed, manufactured and supported within the USA, the SFS4294F features:

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

### Package Configuration



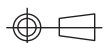
Components are shown for reference only. Actual product may differ from that shown.

#### Connector

#### Input Connector

Molex  
51021-0400

J1-1 Cathode 1  
 J1-2 Anode  
 J1-3 Cathode 2  
 J1-4 N/C





### 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	-	-	2	-	-
LED Forward Voltage	$V_F$	2.8	3.0	3.4	V
String voltage	$V_S$	47.6	51.0	57.8	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.



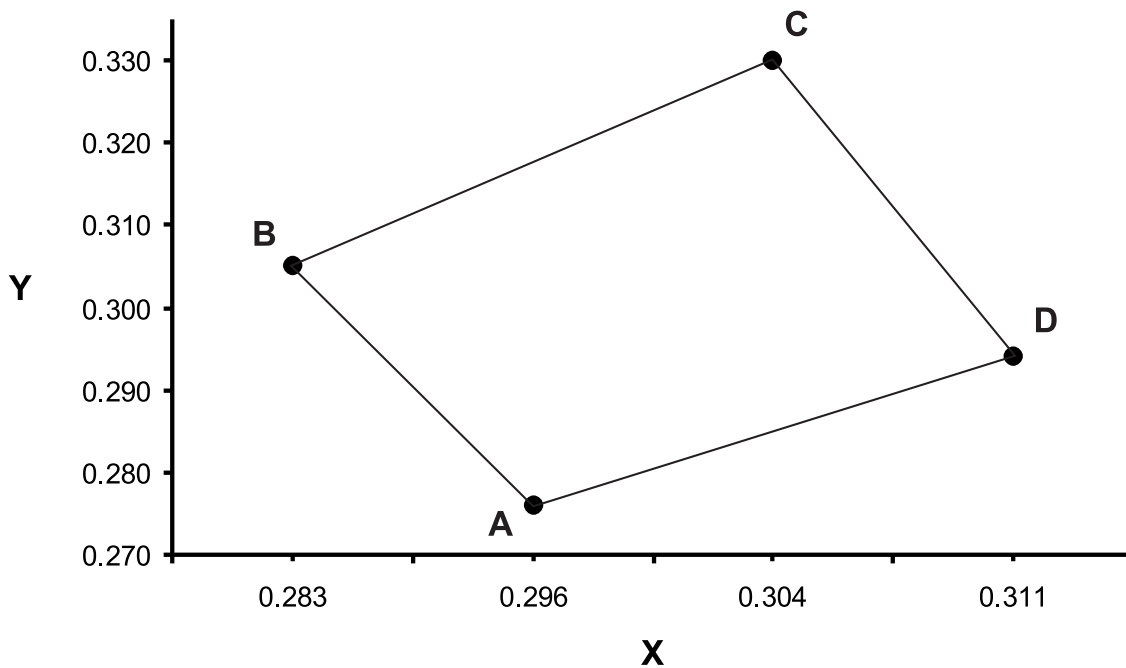
## Backlight Chromaticity Coordinate Boundaries <sup>(1)</sup>

(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



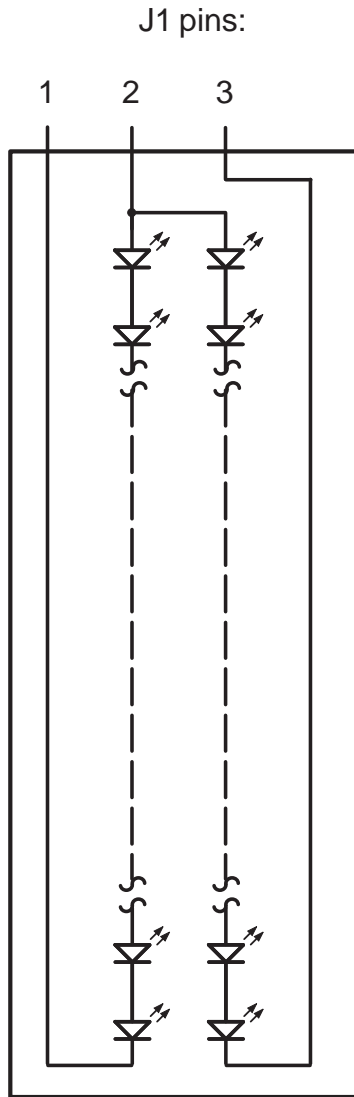


Figure 1  
SFS Connectivity



Endicott Research Group, Inc. (ERG) reserves the right to make changes in circuit design and/or specifications at any time without notice. Accordingly, the reader is cautioned to verify that data sheets are current before placing orders. Information furnished by ERG is believed to be accurate and reliable. However, no responsibility is assumed by ERG for its use.