

# Surface Mount Low Pass Filters

50Ω DC to 865 MHz

**NEW!**

**SCLF-SERIES  
SALF-SERIES**

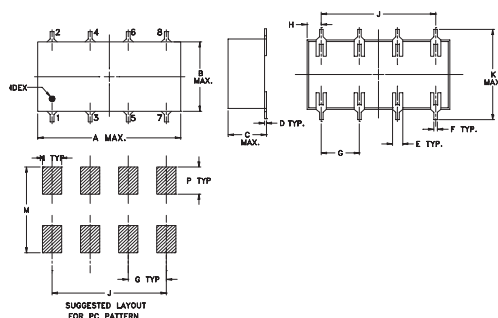
## Maximum Ratings

|                       |                |
|-----------------------|----------------|
| Operating Temperature | -40°C to 85°C  |
| Storage Temperature   | -55°C to 100°C |
| Power Input           | 0.5W Max.      |

## Pin Connections

|        |             |
|--------|-------------|
| IN     | 1           |
| OUT    | 8           |
| GROUND | 2,3,4,5,6,7 |

## Outline Drawing

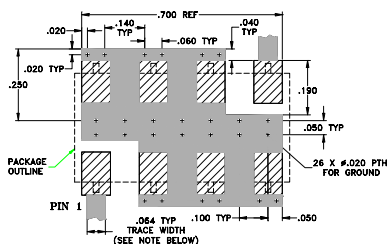


## YY101\*/YY161 Outline Dimensions (inch/mm)

| A     | B     | C    | D     | E    | F    | G     | H    |
|-------|-------|------|-------|------|------|-------|------|
| .75   | .38   | .28  | .010  | .050 | .020 | .200  | .075 |
| 19.05 | 9.65  | 7.11 | 0.25  | 1.27 | 0.51 | 5.08  | 1.91 |
| J     | K     | L    | M     | N    | P    | wt.   |      |
| .600  | .450  | —    | .470  | .100 | .150 | grams |      |
| 15.24 | 11.43 | —    | 11.94 | 2.54 | 3.81 | 1.6   |      |

\*For YY101, C=0.2" (5.08 mm)

## Demo Board MCL P/N: TB-187 Suggested PCB Layout (PL-049)



**NOTE:** TRACE WIDTH IS SHOWN FOR ROGERS RO4350 WITH DIELECTRIC THICKNESS .030" ± .002". COPPER: 1/2 OZ. EACH SIDE FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

■ DENOTES PCB COPPER LAYOUT  
▨ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK

## Features

- 7-section elliptic function
- excellent rejection, 20 dB at 1.25\* f<sub>3</sub> dB and 40 dB at 1.46\* f<sub>3</sub> dB
- low cost

## Applications

- defense communications
- receivers transmitters
- harmonic rejection of vcocs



CASE STYLE: YY161/YY101

## Electrical Specifications

| MODEL NO. | PASSBAND (MHz)<br>(loss < 1 dB)<br>Min. | f <sub>co</sub> , MHz<br>Nom.<br>(loss 3 dB)<br>Typ. | STOP BAND (MHz)        |                        | VSWR (:1)        |                  | CASE STYLE | PRICE \$<br>Qty. (1-9) |
|-----------|-----------------------------------------|------------------------------------------------------|------------------------|------------------------|------------------|------------------|------------|------------------------|
|           |                                         |                                                      | (loss > 20 dB)<br>Min. | (loss > 40 dB)<br>Min. | Passband<br>Typ. | Stopband<br>Typ. |            |                        |
| SCLF-4.7  | DC-4.7                                  | 5.6                                                  | 7.4-8.5                | 8.5-320                | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-8.4  | DC-8.4                                  | 9.6                                                  | 12.2-14                | 14-210                 | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-10   | DC-10                                   | 11.4                                                 | 14.8-17                | 17-230                 | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-23   | DC-23                                   | 25                                                   | 29-33.5                | 33.5-340               | 1.5              | 18               | YY161      | 8.95                   |
| SCLF-27   | DC-27                                   | 30                                                   | 35.2-40.6              | 40.6-490               | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-36   | DC-36                                   | 40                                                   | 48-53.5                | 53.5-400               | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-44   | DC-44                                   | 48.5                                                 | 59-65.5                | 65.5-420               | 1.3              | 18               | YY161      | 8.95                   |
| SCLF-65   | DC-65                                   | 71                                                   | 84-94                  | 94-510                 | 1.3              | 18               | YY161      | 8.95                   |
| SALF-78   | DC-78                                   | 93                                                   | 116-132                | 132-550                | 1.3              | 18               | YY101      | 6.95                   |
| SALF-116  | DC-116                                  | 142                                                  | 178-210                | 210-850                | 1.3              | 18               | YY101      | 6.95                   |
| SALF-146  | DC-146                                  | 171                                                  | 205-240                | 240-850                | 1.5              | 18               | YY101      | 6.95                   |
| SALF-265  | DC-265                                  | 308                                                  | 375-450                | 450-1100               | 1.2              | 18               | YY101      | 6.95                   |
| SALF-325  | DC-325                                  | 383                                                  | 470-580                | 580-1300               | 1.3              | 18               | YY101      | 6.95                   |
| SALF-396  | DC-396                                  | 458                                                  | 550-605                | 605-1460*              | 1.3              | 18               | YY101      | 6.95                   |
| SALF-490  | DC-490                                  | 620                                                  | 775-900                | 900-1750*              | 1.3              | 18               | YY101      | 6.95                   |
| SALF-580  | DC-580                                  | 720                                                  | 1000-1300              | 1300-2100              | 1.5              | 18               | YY101      | 6.95                   |
| SALF-680  | DC-680                                  | 790                                                  | 1090-1400              | 1400-2200              | 1.4              | 18               | YY101      | 6.95                   |
| SALF-800  | DC-800                                  | 935                                                  | 1180-1300              | 1300-2550*             | 1.6              | 18               | YY101      | 6.95                   |
| SALF-865  | DC-865                                  | 980                                                  | 1250-1380              | 1380-2550*             | 1.4              | 18               | YY101      | 6.95                   |

\*Stopband loss, 35 dB min.

**For other cut-off frequency requirements, please contact factory,  
new models typically ship within 2-3 weeks A.R.O**

