

# S14 SERIES

## GENERAL PURPOSE LP FILTER

STEEPNESS FACTOR 1.40

This range of 7-pole Elliptical Function Low Pass Filters is intended for bandwidth limitation with minimal distortion of the transmitted signal. The filters are corrected for Group Delay distortion over approx. 92% of the passband and for loss distortion over the entire passband. Degradation of a composite video signal is minimal when a 4.5 MHz or 5.5 MHz filter is selected for a 525 or 625 line T.V. system. The filters may be used for antialiasing in A-D and D-A systems.

| Order Code | End of Passband<br>MHz | Start of Stopband<br>MHz | Group Delay Ripple<br>ns | Delay Time<br>ns |
|------------|------------------------|--------------------------|--------------------------|------------------|
| S14020G    | 2.00                   | 2.80                     | 40                       | 785              |
| S14025G    | 2.50                   | 3.50                     | 30                       | 628              |
| S14030G    | 3.00                   | 4.20                     | 25                       | 523              |
| S14035G    | 3.50                   | 4.90                     | 25                       | 448              |
| S14040G    | 4.00                   | 5.60                     | 20                       | 392              |
| S14045G    | 4.50                   | 6.30                     | 20                       | 349              |
| S14050G    | 5.00                   | 7.00                     | 15                       | 314              |
| S14055G    | 5.50                   | 7.70                     | 15                       | 285              |
| S14060G    | 6.00                   | 8.40                     | 15                       | 262              |
| S14065G    | 6.50                   | 9.10                     | 12                       | 242              |
| S14070G    | 7.00                   | 9.80                     | 12                       | 224              |
| S14075G    | 7.50                   | 10.50                    | 10                       | 209              |
| S14080G    | 8.00                   | 11.20                    | 10                       | 196              |
| S14085G    | 8.50                   | 11.90                    | 10                       | 185              |
| S14090G    | 9.00                   | 12.60                    | 10                       | 174              |
| S14095G    | 9.50                   | 13.20                    | 10                       | 165              |
| S14100G    | 10.00                  | 14.00                    | 10                       | 157              |

|            |   |          |
|------------|---|----------|
| Other data | <i>Impedance</i>  | 75 ohms  |
|            | <i>Stopband attenuation wrt 100 kHz</i>   | > 40 dB  |
|            | <i>Insertion Loss at 100 kHz</i>  | < 1.3 dB |
|            | <i>Amplitude ripple in passband</i>   | < 0.2 dB |
|            | <i>Video performance for filters of 5.5 MHz (4.5 MHz for 525 line) and above.</i> |          |
|            | <i>Pulse and bar: K - rating</i>  | < 0.5%   |
|            | <i>Luminance/Chrominance Gain inequality (20T)</i>                                | < 3%     |
|            | <i>Luminance/Chrominance Delay inequality (20T)</i>                               | < 10 ns  |
|            | <i>Aqueous Washable</i>   | Yes      |
|            | <i>Package</i>  | DR00014A |

# PACKAGE DETAIL

