

# S17 SERIES

## GENERAL PURPOSE LP FILTER

STEEPNESS FACTOR 1.72

This range of 5-pole Elliptical Function Low Pass Filters is intended for bandwidth limitation with minimal distortion of the transmitted signal. The modest rate of cut off minimises time domain ringing. The filters are corrected for Group Delay distortion over 92% of the passband and for loss distortion over the entire passband. Degradation of a composite video signal is small when a 4.5 MHz or 5.5 MHz filter is selected for a 525 or 625 line T.V. system.

| Order Code | End of Passband<br>MHz | Start of Stopband<br>MHz | Group Delay Ripple<br>ns | Delay Time<br>ns |
|------------|------------------------|--------------------------|--------------------------|------------------|
| S17020G    | 2.00                   | 3.44                     | 65                       | 500              |
| S17025G    | 2.50                   | 4.30                     | 55                       | 400              |
| S17030G    | 3.00                   | 5.16                     | 45                       | 333              |
| S17035G    | 3.50                   | 6.02                     | 40                       | 286              |
| S17040G    | 4.00                   | 6.88                     | 35                       | 250              |
| S17045G    | 4.50                   | 7.74                     | 30                       | 222              |
| S17050G    | 5.00                   | 8.60                     | 25                       | 200              |
| S17055G    | 5.50                   | 9.46                     | 25                       | 182              |
| S17060G    | 6.00                   | 10.32                    | 25                       | 167              |
| S17065G    | 6.50                   | 11.18                    | 20                       | 154              |
| S17070G    | 7.00                   | 12.04                    | 20                       | 143              |
| S17075G    | 7.50                   | 12.90                    | 20                       | 133              |
| S17080G    | 8.00                   | 13.76                    | 15                       | 125              |
| S17085G    | 8.50                   | 14.62                    | 15                       | 118              |
| S17090G    | 9.00                   | 15.48                    | 15                       | 111              |
| S17095G    | 9.50                   | 16.34                    | 15                       | 105              |
| S17100G    | 10.00                  | 17.20                    | 15                       | 100              |

|            |                                                                                   |          |
|------------|-----------------------------------------------------------------------------------|----------|
| 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>                                               | < 0.3 dB |
|            | <i>Video performance for filters of 5.0 MHz (4.5 MHz for 525 line) and above.</i> |          |
|            | <i>Pulse and bar: K - rating</i>                                                  | < 1.0%   |
|            | <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

