

# Ceramic High Pass Filter

## HFCN-3100+

### Typical Performance Data

| FREQ.<br>(MHz) | INSERTION LOSS<br>(dB) |          |           | INPUT RETURN LOSS<br>(dB) |          |           | OUTPUT RETURNLOSS<br>(dB) |          |           |
|----------------|------------------------|----------|-----------|---------------------------|----------|-----------|---------------------------|----------|-----------|
|                | @ -55° C               | @ +25° C | @ +100° C | @ -55° C                  | @ +25° C | @ +100° C | @ -55° C                  | @ +25° C | @ +100° C |
| 50             | 43.14                  | 41.38    | 42.73     | 0.07                      | 0.29     | 0.11      | 0.03                      | 0.14     | 0.07      |
| 100            | 48.29                  | 48.65    | 47.75     | 0.11                      | 0.12     | 0.12      | 0.13                      | 0.14     | 0.14      |
| 280            | 40.07                  | 39.61    | 39.56     | 0.09                      | 0.11     | 0.14      | 0.12                      | 0.14     | 0.16      |
| 540            | 34.60                  | 34.44    | 34.46     | 0.09                      | 0.14     | 0.18      | 0.13                      | 0.16     | 0.20      |
| 1000           | 31.65                  | 31.68    | 31.69     | 0.11                      | 0.19     | 0.26      | 0.16                      | 0.21     | 0.26      |
| 1670           | 40.37                  | 41.65    | 42.90     | 0.19                      | 0.29     | 0.38      | 0.23                      | 0.31     | 0.37      |
| 1810           | 56.94                  | 56.75    | 54.86     | 0.21                      | 0.31     | 0.40      | 0.25                      | 0.33     | 0.40      |
| 2000           | 39.82                  | 38.72    | 38.02     | 0.24                      | 0.36     | 0.45      | 0.28                      | 0.38     | 0.46      |
| 2240           | 33.34                  | 33.42    | 33.51     | 0.30                      | 0.44     | 0.55      | 0.36                      | 0.48     | 0.57      |
| 2250           | 33.36                  | 33.52    | 33.64     | 0.30                      | 0.44     | 0.55      | 0.36                      | 0.48     | 0.57      |
| 2280           | 33.31                  | 33.68    | 34.18     | 0.31                      | 0.45     | 0.57      | 0.37                      | 0.49     | 0.59      |
| 2300           | 33.57                  | 34.04    | 34.81     | 0.31                      | 0.45     | 0.58      | 0.38                      | 0.50     | 0.60      |
| 2450           | 38.00                  | 39.73    | 39.29     | 0.37                      | 0.54     | 0.69      | 0.45                      | 0.59     | 0.72      |
| 2500           | 39.74                  | 38.22    | 35.07     | 0.40                      | 0.58     | 0.74      | 0.47                      | 0.63     | 0.77      |
| 2630           | 28.09                  | 25.36    | 23.10     | 0.48                      | 0.70     | 0.92      | 0.56                      | 0.76     | 0.96      |
| 2700           | 22.32                  | 20.22    | 18.36     | 0.56                      | 0.83     | 1.10      | 0.65                      | 0.89     | 1.15      |
| 2920           | 9.58                   | 8.40     | 7.36      | 1.56                      | 2.24     | 3.04      | 1.68                      | 2.33     | 3.11      |
| 3050           | 4.72                   | 4.02     | 3.53      | 3.79                      | 5.23     | 6.82      | 3.85                      | 5.27     | 6.90      |
| 3100           | 3.41                   | 2.93     | 2.65      | 5.34                      | 7.24     | 9.25      | 5.36                      | 7.24     | 9.33      |
| 3140           | 2.60                   | 2.29     | 2.14      | 6.98                      | 9.31     | 11.76     | 6.93                      | 9.23     | 11.79     |
| 3150           | 2.43                   | 2.16     | 2.03      | 7.45                      | 9.90     | 12.49     | 7.38                      | 9.79     | 12.49     |
| 3180           | 1.98                   | 1.82     | 1.78      | 9.05                      | 11.90    | 14.98     | 8.86                      | 11.63    | 14.78     |
| 3200           | 1.75                   | 1.66     | 1.65      | 10.26                     | 13.41    | 16.85     | 9.96                      | 12.98    | 16.41     |
| 3270           | 1.03                   | 1.25     | 1.34      | 15.78                     | 20.72    | 26.06     | 14.83                     | 18.68    | 22.24     |
| 3300           | 1.03                   | 1.14     | 1.27      | 19.23                     | 25.85    | 28.93     | 17.39                     | 21.03    | 23.02     |
| 3400           | 0.79                   | 0.98     | 1.14      | 29.23                     | 24.13    | 21.63     | 22.76                     | 20.83    | 19.48     |
| 3500           | 0.71                   | 0.91     | 1.08      | 19.66                     | 18.32    | 17.75     | 18.89                     | 17.41    | 16.74     |
| 4000           | 0.58                   | 0.73     | 0.86      | 14.04                     | 14.84    | 15.46     | 14.16                     | 14.78    | 15.18     |
| 4500           | 0.49                   | 0.67     | 0.85      | 16.67                     | 16.36    | 16.14     | 16.92                     | 16.71    | 16.73     |
| 5000           | 0.34                   | 0.50     | 0.68      | 22.97                     | 21.80    | 20.67     | 25.46                     | 23.29    | 22.25     |
| 6000           | 0.13                   | 0.33     | 0.52      | 27.19                     | 27.15    | 27.11     | 35.79                     | 29.16    | 26.89     |
| 6500           | 0.01                   | 0.17     | 0.37      | 25.28                     | 24.32    | 24.04     | 26.90                     | 24.86    | 24.52     |
| 7000           | 0.00                   | 0.18     | 0.38      | 20.41                     | 20.90    | 21.21     | 20.87                     | 21.64    | 22.01     |
| 7500           | 0.08                   | 0.16     | 0.38      | 18.32                     | 18.20    | 17.87     | 18.88                     | 19.03    | 18.95     |
| 8000           | 0.15                   | 0.11     | 0.38      | 16.65                     | 15.96    | 14.97     | 17.10                     | 16.34    | 15.15     |
| 8050           | 0.18                   | 0.10     | 0.35      | 17.58                     | 16.12    | 14.93     | 17.76                     | 16.28    | 14.99     |
| 8100           | 0.20                   | 0.08     | 0.36      | 18.24                     | 16.31    | 15.08     | 18.34                     | 16.35    | 15.00     |
| 8150           | 0.24                   | 0.04     | 0.32      | 18.20                     | 16.58    | 15.28     | 18.74                     | 16.70    | 15.25     |
| 8200           | 0.23                   | 0.04     | 0.29      | 17.85                     | 16.85    | 15.67     | 18.71                     | 17.21    | 15.71     |
| 9000           | 0.29                   | 0.03     | 0.32      | 19.18                     | 20.25    | 21.43     | 17.99                     | 18.35    | 18.48     |
| 9500           | 0.32                   | 0.09     | 1.08      | 17.39                     | 20.02    | 21.91     | 16.13                     | 18.62    | 20.78     |
| 9900           | 0.39                   | 0.10     | 0.18      | 17.99                     | 19.69    | 21.76     | 17.87                     | 19.57    | 22.12     |
| 10000          | 0.37                   | 0.09     | 0.18      | 17.09                     | 19.23    | 21.31     | 17.42                     | 19.66    | 22.64     |
| 11000          | 0.18                   | 0.24     | 0.73      | 16.82                     | 14.97    | 13.19     | 16.14                     | 14.39    | 12.71     |

#### Notes

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