

| Item                         | Spec                | Impedance         |                                          |                   | Frequency                    | ATF079                                                     |
|------------------------------|---------------------|-------------------|------------------------------------------|-------------------|------------------------------|------------------------------------------------------------|
| Insertion Loss<br>Line-Phone | <=1dB               | Z <sub>ADSL</sub> | Z <sub>POTS</sub>                        | Z <sub>POTS</sub> |                              | 0.57                                                       |
|                              | @1KHz               |                   |                                          |                   |                              |                                                            |
|                              | +/- 1.0dB           | Z <sub>ADSL</sub> | Z <sub>POTS</sub>                        | Z <sub>POTS</sub> | 300Hz to 3400Hz<br>Ref.@1KHz | (@300)0.1<br>(@3400)1.32                                   |
|                              | <3.0dB              | Z <sub>ADSL</sub> | 200 OHM                                  | 200 OHM           | 16KHz +/-1KHz                | 0.33-0.36                                                  |
|                              | <=1.2dB             | Z <sub>ADSL</sub> | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 1KHz to 60KHz                | 0.20~0.92                                                  |
|                              | <=1.5dB             |                   | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 1KHz to 60KHz                | 0.22~0.90                                                  |
|                              | <=2.0dB             | Z <sub>ADSL</sub> | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 60KHz to 80KHz               | 1.27~1.73                                                  |
|                              | <=2.5dB             |                   | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 60KHz to 80KHz               | 1.02~1.35                                                  |
| Insertion Loss<br>Line-ADSL  | <=4.0dB             | Z <sub>ADSL</sub> | Z <sub>ISDN</sub> ,<br>Z <sub>POTS</sub> | Z <sub>LINE</sub> | 120KHz to 170KHz             | 0.18~0.16<br>0.18~0.18                                     |
|                              | <=1.0dB             | Z <sub>ADSL</sub> | Z <sub>ISDN</sub> ,<br>Z <sub>POTS</sub> | Z <sub>LINE</sub> | 170KHz to 1104KH             | 0.16~0.34<br>0.18~0.34                                     |
|                              |                     |                   |                                          |                   |                              |                                                            |
| Attenuation<br>ADSL-Phone    | >=55dB              | Z <sub>ADSL</sub> | Z <sub>POTS</sub>                        | Z <sub>LINE</sub> | 138KHz to 2208KH             | 64.66~56.78                                                |
| Attenuation<br>ADSL-Phone    | >=55dB              |                   |                                          |                   | 138KHz to 150KHz             | 69.64~76.08                                                |
|                              | >=62dB              | Z <sub>ADSL</sub> | Z <sub>ISDN</sub>                        | Z <sub>LINE</sub> | 150KHz to 1104KH             | 76.08~62.18                                                |
|                              | >=55dB              |                   |                                          |                   | 1104KHz to 2208KH            | 62.18~56.54                                                |
| Return Loss                  | 300 to 3400Hz>=12dB |                   |                                          |                   | 300Hz to 3400Hz              | (@300)26.92<br>(@600)21.50<br>(@1500)16.06<br>(@3400)13.38 |
|                              | 600 to 1500Hz>=15dB | Z <sub>ADSL</sub> | Z <sub>POTS</sub>                        | Z <sub>POTS</sub> |                              |                                                            |
|                              | >=16dB              | Z <sub>ADSL</sub> | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 1KHz to 60KHz                | 32.12~16.72                                                |
|                              | >=12dB              |                   | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 1KHz to 60KHz                | 31.94~12.00                                                |
|                              | >=14dB              | Z <sub>ADSL</sub> | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 60KHz to 80KHz               | 16.72~15.22                                                |
|                              | >=10dB              |                   | Z <sub>ISDN</sub>                        | Z <sub>ISDN</sub> | 60KHz to 80KHz               | 15.22~13.70                                                |
|                              |                     |                   |                                          |                   |                              |                                                            |