

## ANSI/TIA-568-C.2 CAT 6 Electrical Specifications

| Frequency<br>MHz | Insertion Loss @ 20°C |                          |                         |                            |
|------------------|-----------------------|--------------------------|-------------------------|----------------------------|
|                  | Maximum<br>dB/100 m   | NEXT Minimum<br>dB/100 m | ACR Minimum<br>dB/100 m | PSNEXT Minimum<br>dB/100 m |
|                  | Specified             | Specified                | Calculated              | Specified                  |
| 1                | 2.0                   | 74.3                     | 72.3                    | 72.3                       |
| 4                | 3.8                   | 65.3                     | 61.5                    | 63.3                       |
| 10               | 6.0                   | 59.3                     | 53.3                    | 57.3                       |
| 16               | 7.6                   | 56.3                     | 48.6                    | 54.2                       |
| 20               | 8.5                   | 54.8                     | 46.3                    | 52.8                       |
| 25               | 9.5                   | 53.3                     | 43.8                    | 51.3                       |
| 31.25            | 10.7                  | 51.9                     | 41.2                    | 49.9                       |
| 62.5             | 15.4                  | 47.4                     | 32.0                    | 45.4                       |
| 100              | 19.8                  | 44.3                     | 24.5                    | 42.3                       |
| 200              | 29.0                  | 39.8                     | 10.8                    | 37.8                       |
| 250              | 32.8                  | 38.3                     | 5.5                     | 36.3                       |

| Frequency<br>MHz | PSACR Minimum<br>dB/100 m | Return Loss Minimum<br>dB/100 m | ELFEXT Minimum<br>dB/100 m | PSELFEXT Minimum<br>dB/100 m |
|------------------|---------------------------|---------------------------------|----------------------------|------------------------------|
|                  | Calculated                | Specified                       | Specified                  | Specified                    |
| 1                | 70.3                      | 20.0                            | 67.8                       | 64.8                         |
| 4                | 59.5                      | 23.0                            | 55.8                       | 52.8                         |
| 10               | 51.3                      | 25.0                            | 47.8                       | 44.8                         |
| 16               | 46.6                      | 25.0                            | 43.7                       | 40.7                         |
| 20               | 44.3                      | 25.0                            | 41.8                       | 38.8                         |
| 25               | 41.8                      | 24.3                            | 39.8                       | 36.8                         |
| 31.25            | 39.2                      | 23.6                            | 37.9                       | 34.9                         |
| 62.5             | 30.0                      | 21.5                            | 31.9                       | 28.9                         |
| 100              | 22.5                      | 20.1                            | 27.8                       | 24.8                         |
| 200              | 8.8                       | 18.0                            | 21.8                       | 18.8                         |
| 250              | 3.5                       | 17.3                            | 19.8                       | 16.8                         |