



Component	0.914 km (3 kft)	1.83 km (6 kft)
R <sub>1</sub> , R <sub>4</sub>	124 Ω	249 Ω
R <sub>2</sub> , R <sub>3</sub>	174 Ω	312 Ω
C <sub>1</sub> , C <sub>4</sub>	0.0113 μF	0.0226 μF
C <sub>2</sub> , C <sub>3</sub>	0.0122 μF	0.0255 μF
L <sub>1</sub> , L <sub>2</sub>	0.336 mH	0.983 mH

**Notes:**

- (1) All values are ±1%.
- (2) 2.7 km (9 kft) and 4.6 km (15 kft) can be made up of cascaded sections of the above.

**Loop Simulator for 26 AWG Cable**

[61 FR 42187, Aug. 14, 1996]

**§ 68.318 Additional limitations.**

(a) *General.* Registered terminal equipment for connection to those services discussed below must incorporate the specified features.

(b) *Registered terminal equipment connecting to 1.544 Mbps digital service.* (1) Until December 18, 1989, terminal equipment connecting to 1.544 Mbps service shall contain circuitry that assures continuity of output signal. This equipment shall assure that either the outgoing signal meets the minimum pulse density requirement below or one of the specified keep alive signals is transmitted. Power to operate this equipment may come from the line or premises power. Line powered functioning shall be achieved as follows: A

direct current connection shall be provided between the simplexes of the transmit and receive pairs. The line power to operate the equipment which assures continuity of the output signal shall be derived from the direct current connection between the simplexes of the transmit and receive pairs. For circuits placed in service prior to February 18, 1988, the telephone company will drive 60 mA through this connection from a constant current source. With 60 mA between the transmit and receive pairs, the voltage drop between the transmit and receive pairs shall not exceed 67 volts. The minimum acceptable average pulse density is 0.125. The maximum acceptable length of a continuous sequence of "zeros" is 80

pulse positions. The keep alive signal inserted when the pulse density drops too low shall be one of the following:

(i) *Type 1 Keep Alive Signal.* This signal is a consecutive sequence of all "ones".

(ii) *Type 2 Keep Alive Signal.* This signal is a sequence of 193-bit frames consisting of a framing bit plus 192-bit sequence of consecutive "ones". The framing bit executes the following repetitive pattern every 12 frames:

1 0 0 0 1 1 0 1 1 1 0 0

(iii) *Type 3 Keep Alive Signal.* This signal sequence is the regenerated received signal connected to the transmit port through a loopback circuit.

(2) For circuits placed in service on or after February 18, 1988, and for all circuits as of December 18, 1989, whenever such circuits were placed in service, the telephone company is not required to provide line power to operate continuity of output functions in terminal equipment connecting to 1.544 Mbps service. As of December 18, 1989, such terminal equipment is not required to contain continuity of output capability, provided, however, that telephone companies by tariff may require that such equipment contain the continuity of output capability described in this paragraph up to December 18, 1992. Applications for registration of terminal equipment for connection to 1.544 Mbps service which does not contain continuity of output capability shall be accepted as of December 18, 1988, but eligibility for connection to 1.544 Mbps service shall be governed by this paragraph.

(c) *Registered terminal equipment connecting to the public switched network—*

(1) *Limitation on automatic dialing.* Automatic dialing to a particular number must cease after 15 successive attempts. This rule does not apply to manually activated dialers which dial a number just once following each activation.

(2) *Line seizure by automatic telephone dialing systems.* Automatic telephone dialing systems which deliver a recorded message to the called party must release the called party's telephone line within 5 seconds of the time notification is transmitted to the sys-

tem that the called party has hung up, to allow the called party's line to be used to make or receive other calls.

(3) *Telephone facsimile machines; identification of the sender of the message.* It shall be unlawful for any person within the United States to use a computer or other electronic device to send any message via a telephone facsimile unless such message clearly contains, in a margin at the top or bottom of each transmitted page or on the first page of the transmission, the date and time it is sent and an identification of the business, other entity, or individual sending the message and the telephone number of the sending machine or of such business, other entity, or individual. The telephone number provided may not be a 900 number or any other number for which charges exceed local or long distance transmission charges. Telephone facsimile machines manufactured on and after December 20, 1992, must clearly mark such identifying information on each transmitted message. Facsimile modem boards manufactured on and after December 13, 1995, must comply with the requirements of this section.

(d) *Requirement that registered equipment allow access to common carriers.* Any equipment or software manufactured or imported on or after April 17, 1992, and installed by any aggregator shall be technologically capable of providing consumers with access to interstate providers of operator services through the use of equal access codes. The terms used in this paragraph shall have the meanings defined in § 64.708 of this chapter (47 CFR 64.708).

[49 FR 48726, Dec. 14, 1984, as amended at 51 FR 951, Jan. 9, 1986; 52 FR 43077, Nov. 9, 1987; 52 FR 49413, Dec. 31, 1987; 53 FR 1103, Jan. 15, 1988; 56 FR 18524, Apr. 23, 1991; 56 FR 56166, Nov. 1, 1991; 57 FR 48336, Oct. 23, 1992; 60 FR 42069, Aug. 15, 1995]

## Subpart E—Complaint Procedures

### § 68.400 Content.

A complaint shall be in writing and shall contain:

(a) The name and address of the complainant,

(b) The name (and address, if known) of the defendant against whom the complaint is made,