JAN–C–17A

E–50. INDIVIDUAL CABLE SPECIFICATION SHEET FOR TYPE RG–83/U CABLE, DATED 25 JULY 1946

CONSTRUCTION

Inner conductor (see par. D–3).—No. 10 AWG soft copper wire. Nominal diameter, 0.102 inch.

Cable core (see par. D–4).—Solid, type A. Diameter, 0.240 ± 0.005 inch. Note: Type A is polyethylene.

Outer conductor (see par. D–5).—Single braid. Diameter, 0.275 ± 0.005 inch.

Braid................................................................. Plain soft copper.
Wire................................................................. No. 33 AWG.
Carriers............................................................. 24.
Ends................................................................. 7.
Picks/inch......................................................... 8.0 ± 10 percent.

Jacket (see par. D–6).—Type I synthetic resin. Diameter, 0.405 ± 0.005 inch. Minimum wall thickness, 0.050 inch. Note: Type I is PVC.

TEST REQUIREMENTS

Flow (see par. F–7).—6 pounds.
Dielectric strength (see par. F–13).—8,000 volts r.m.s.
Corona (see par. F–13).—2,300 volts r.m.s.
Attenuation (see par. F–17).—9.0 db/100 ft. at 400 mc (estimated maximum).
Impedance (see par. F–20).—33.5 to 36.5 ohms (estimated).

ENGINEERING DATA

Nominal capacitance.—44 mmf/ft. (estimated). Note: mmf/ft = pF/ft
Nominal impedance.—35 ohms.
Maximum operating voltage.—2,000 r.m.s.
Nominal attenuation.—(estimated).
3 db/100 ft. at 100 mc.
4.5 db/100 ft. at 300 mc.
25 db/100 ft at 3,000 mc.

Note: Although not specified, the Velocity of Propagation is 66%, based upon the stated values of nominal capacitance and nominal impedance. $V_p = \frac{101600}{(44 \times 35)}$