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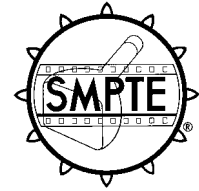
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SMPTE STANDARD

ANSI/SMPTE 35M-1997

Revision of
ANSI/SMPTE 35M-1991for Television Analog Recording —
1/2-in Type G —
Cassette and Tape

Page 1 of 8 pages

1 Scope

This standard specifies the dimensions of a video cassette and a video magnetic tape intended for use with 1/2-in type G video systems operating at tape speeds of 40, 20, and/or 13.3 mm/s (1.57, 0.79, and/or 0.52 in/s).

2 Video tape

2.1 The width of the video tape shall be 12.65 mm $\pm$ 0.02 mm (0.498 in $\pm$ 0.001 in).

2.2 The maximum allowable thickness of the magnetic tape, including the coating, shall be 25 μ m. The distance between the edge of the reel flange and the outer edge of a full reel pack shall be more than 0.5 mm (0.02 in).

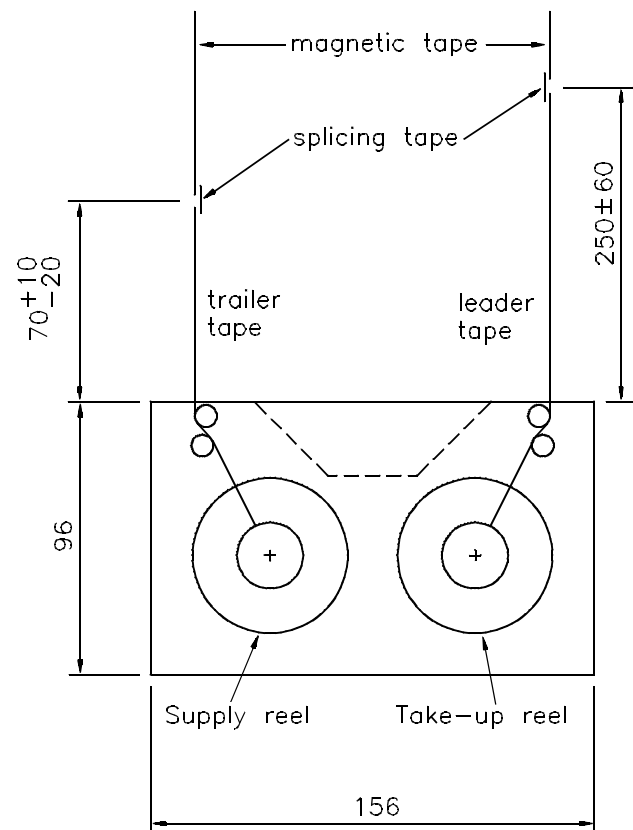
3 Leader and trailer tape

3.1 The leader and trailer tape of the width and thickness specified in 3.2 and 3.3 shall contain a metal foil that provides conductivity per centimeter of more than 200 S to ensure that automatic stopping devices function properly at both ends of the magnetic tape.

3.2 The width of the leader and trailer tape shall be 12.65 mm $\pm$ 0.03 mm (0.498 in $\pm$ 0.001 in).

3.3 The maximum allowable thickness of the leader and trailer tape shall be 45 μ m.

3.4 The length of the leader and trailer tape shall be 250 mm $\pm$ 60 mm (9.84 in $\pm$ 2.36 in) and

**Figure 1 – Leader and trailer**

70 mm +10 mm –20 mm (2.76 in + 0.39 in – 0.79 in), respectively (see figure 1).

3.5 The spliced section shall withstand a tension of 15 N.

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4 Datum planes

4.1 Datum plane Z shall be defined by three datum spots, A, B, and C, as shown in figure 4.

4.2 Datum plane X shall be orthogonal to datum plane Z and shall include the centers of datum hole (a) and datum hole (b), as shown in figure 3.

4.3 Datum plane Y shall be orthogonal to both datum plane X and datum plane Z and shall include the center of datum hole (a), as shown in figure 3.

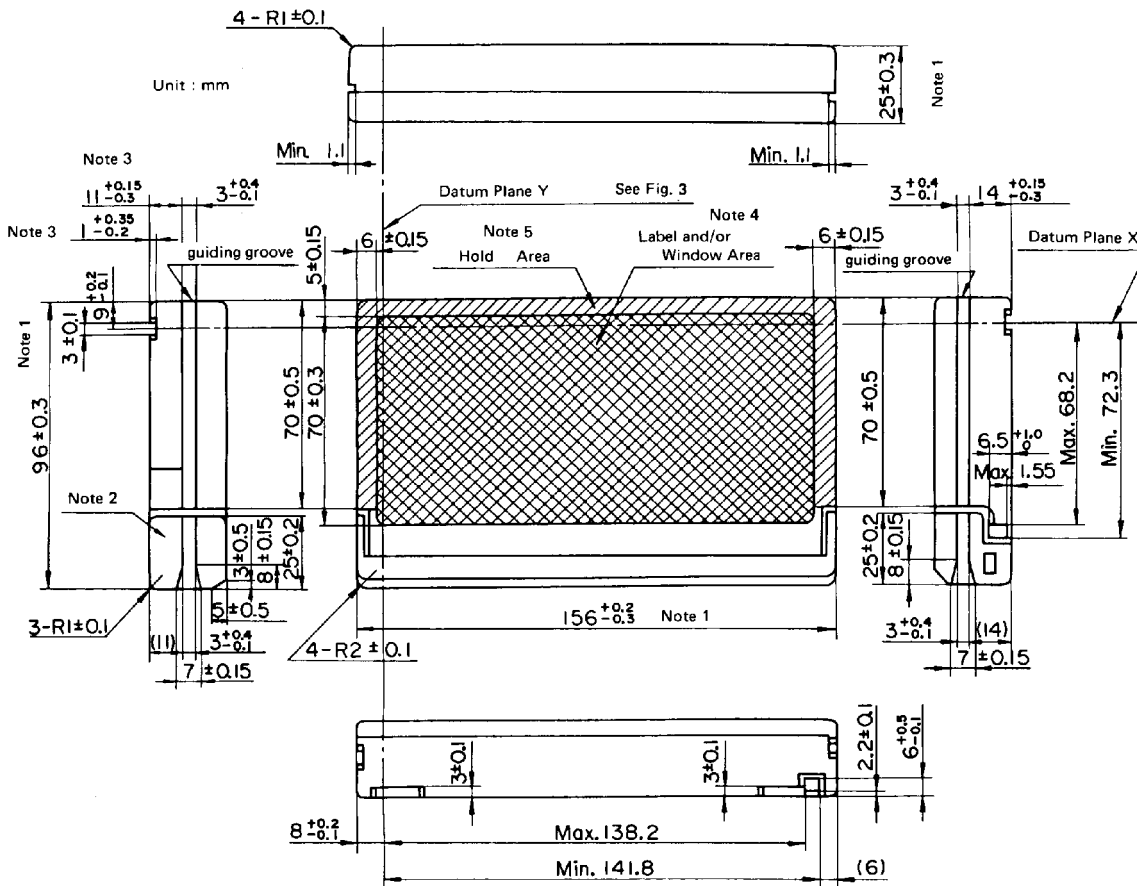
5 Dimensions

5.1 The dimensions necessary for the interface of equipment shall be as specified in the figures.

5.2 Metric dimensions are primary.

6 Measurement environment

The temperature shall be $20^{\circ}\text{C} \pm 2^{\circ}\text{C}$ ($68^{\circ}\text{F} \pm 4^{\circ}\text{F}$) with a relative humidity of $(50 \pm 2)\%$.



NOTES

- The dimensions are verified by using limit gauges.
- No part of the lid shall protrude beyond the bottom plane of the cassette during opening and closing of the lid.
- This dimension shall be measured from datum plane Z.
- Label and/or window area is available for label and/or window.
- The cassette may be held in position by the recorder and/or player unit on this holding area.

Figure 2 -- Top and side view of video cassette