

Product Specifications

Product Name : DVD-R for General Ver.2.0

1.0

Revision mark

4.3 Write strategy

Refer to **12. Unrecorded Physical Format** .

4.4 Measuring conditions (PUH) : Recorded disc

Wavelength(λ) : 650 ± 5 nm

Polarization : circularly polarized light

Numerical aperture (NA) : 0.60 ± 0.01

Light intensity at the rim of the pupil of the objective lens
: 60 to 70 % of the maximum intensity level in the radial
direction and over 90% of the maximum intensity level
in the tangential direction.

4.5 Measuring scanning velocity

: 3.49 ± 0.03 m/sec.

4.6 Clamping

Clamping force : 2.0 ± 0.5 N

5. Mechanical Parameters

Items	Requirements	Measuring methods or Conditions
• Outer diameter • Maximum rotation run-out of outer edge • Center hole diameter (One side of the disc) • Center hole diameter (Both sides put together) • Thickness of a disc • Inner diameter of the Clamping area • Outer diameter of the Clamping area • Thickness of a disc in the Clamping area • Mass of a disc	120.00 ± 0.30 mm 0.30 mm max. (peak to peak) $15.00 +0.15/-0.00$ mm 15.00 mm min. $1.20 +0.30/-0.06$ mm 22.0 mm max. 33.0 mm max. $1.20 +0.20/-0.10$ mm 13 g to 20 g	Includes adhesive layer and label.

6. Optical Parameters

Items	Requirements	Measuring methods or conditions
• Thickness of a transparent Substrate • Refractive index (RI) • Birefringence of transparent Substrate • Limits for the angular deviation of the reflected beam (α) a. Radial deviation b. Tangential deviation • Reflectivity • Polarity of modulation • Recording sensitivity fluctuation over the surface	$0.6 +0.020/-0.025$ mm 1.55 ± 0.10 100 nm max. $\pm 0.80^\circ$ $\pm 0.30^\circ$ 45 to 85 % High to Low $P_o \pm 0.05P_o$	Double Pass (PUH with PBS)

7. Recorded Parameters

Items	Requirements	Measuring methods or conditions
• Sense of disc rotation as seen from read-out side • Limit for the velocity variation for the laser beam recorder • Channel bit length averaged over whole disc • Track pitch • Starting diameter of the Lead-in area • Starting diameter of the Data area • Maximum outer diameter of the data area • Outer diameter of the information area • Inner diameter of the Lead-out area • Outer diameter of the Lead-out area • Track pitch a. Average track pitch b. Maximum deviation of track pitch • Limits of the deviation from the recorded layer perpendicular to the Reference plane a. Deviation from nominal value below the rotational frequency determined by the scanning velocity. • Limits of the radial deviation from the track a. Radial run-out of the tracks determined by the scanning velocity	Counterclockwise 0.5% max. (peak to peak) $133.3 \pm 1.4 \text{ nm}$ Continuous spiral from inside to outside. 45.2 mm max. $48.0 +0.0/-0.4 \text{ mm}$ 116.0 mm 70.0 mm min. Outer diameter of Data area +2.0 mm min. 117 mm min. Outer diameter of the Data area Outer diameter of the Information area $0.74 \pm 0.01 \text{ }\mu\text{m}$ $0.74 \pm 0.03 \text{ }\mu\text{m}$ $\pm 0.3 \text{ mm}$ 70 μm (peak to peak)	Diameter of Data area <68.0mm. 68.0mm< Diameter of Data area< 115.0 mm 115.0mm<Diameter of Data area< 116.0mm

Additional specifications exist, but are proprietary to Mitsui Advanced Media, Inc.