

3M Display Materials & Systems Division

2020 Technical Data

3M[™] Reflective Polarizing Mirror (3M RPM)

Product Description

3M[™] Reflective Polarizing Mirror (RPM) is a reflective polarizing mirror film used in half mirror type applications to provide increased brightness for the LCD unit embedded in the mirror assembly. It is a multilayer polyester-based film with adhesive.

Structure (not to scale)

3M RPM

Optical Adhesive



Construction/Performance

Description	3M RPM
Thickness	73 μm nominal
Delamination	≤2.0 mm from edge, excluding tabs
Part Dimensions	Per approved drawing
Effective Transmission	Minimum 1.65
Color shift 0°	Δx: 0.008* Δy: 0.008
Color shift 60°	Δx: 0.015 Δy: 0.015
Haze	Maximum 1.5%
Total Transmittance	Minimum 43%
Reflectivity	Minimum 50%

*Note: Δ is relative to backlight with no enhancement films

Automotive Environmental Testing

Testing condition:

RPM is tested under the following conditions with film laminated to glass.

Test	Condition
Humidity resistance	65°C, 95% relative humidity, 1000 hours
Heat resistance	95°C for 1000 hours
Cold resistance	-40°C for 1000 hours
Thermal shock	95°C for 1 hr to -40°C for 1 hr, 100 cycles

Technical Information

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