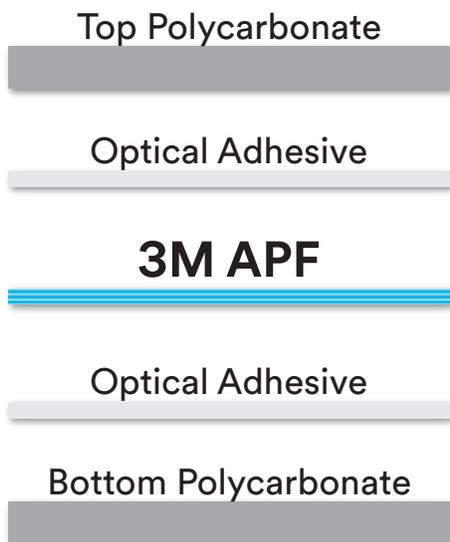


3M™ Automotive Reflective Polarizer (ARP 320)

Product Description

3M™ Automotive Reflective Polarizer (ARP 320) is a reflective polarizing film used in LCD displays to increase brightness over a wide viewing angle. It is a multilayer polyester-based film which has polycarbonate laminated to both sides.

Structure (not to scale)*



*3M DMSD considers its films and tapes as homogeneous under European Union's Directive 2011/65/EU of the European Parliament and of the Council of 8 June 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast) (the RoHS Recast). The product construction described above does not represent the final homogenous film, but is a tool to assist the customer in selecting the proper film that will suit their application needs.

Construction/Performance

Description	3M ARP 320
Thickness	320 ± 40 µm
Delamination	≤2.0 mm from edge, excluding tabs
Part Dimensions	Per approved drawing
Effective Transmission	Minimum 1.66
Color shift 0°	Δx: -0.010 to 0.010* Δy: -0.010 to 0.010
Color shift 60°	Δx: -0.030 to 0.030 Δy: -0.030 to 0.030
Haze	41.5 ±10%
Total Transmittance	49.0 ±5%

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

Automotive Environmental Testing

Testing condition:

ARP 320 is tested under the following conditions with film free floating.

Test	Condition
Humidity resistance	65°C/90% RH, 1000 hrs
Heat resistance	105°C for 1000 hours
Cold resistance	-40°C for 1000 hours
Thermal shock	95°C for 1 hr to -40°C for 1 hr, 300 cycles



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Technical Information

The technical information, recommendations and other statements contained in this document are based on tests or experience 3M believes reliable, but the accuracy or completeness of such information is not guaranteed.

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