

ODMP

https://www.gigahertz-optik.com/en-us/product/odmp/

Product tags:



Description

OP.DI.MA. is a specially processed PTFE material which works as a translucent reflector. This means that radiation will enter into the material and reflect from many interfaces within the material itself. This results in a nearly perfect diffuse reflection. ODMP is a special form of the PTFE material pigmented with black additives. Depending on the density of the additive, gray scale optically diffuse material with different reflectance values can be formed.

ODMP is supplied as raw material in block and plate form. The surface of the raw material must be machined to obtain an optical finish without gloss effects. It can be re-machined and cleaned prolonging its operational life. Machining ODMP is not difficult for those with some experience with processing plastics. All machining methods such as lathe work, drilling, sawing, milling, etc., are possible. See Block Material for Customer Processing for more Information.



Raw ODMP blocks can be used for machining small size integrating sphere inserts, light traps, 3D formed reflectance standards and other diffuse low reflectance parts. For cost effectiveness the size of the raw block should be as close as possible to the maximum dimensions of the final product. Custom size blocks can be ordered in OEM quantity. Custom size blocks are not available for prototypes or in small quantities. For small quantity orders Gigahertz-Optik stocks different size standard blocks for fast delivery. Contact our sales department to discuss your raw block requirements.

Note: Raw block surfaces must be machined to an optical finish.

ODMP unfinished plates

Raw ODMP plates can be used for machining flat reflectance standards and small size components like integrating sphere light trap plugs and other optical components requiring reduced reflectance. For cost effectiveness the size of the raw plate should be as close as possible to the maximum dimensions of the final product. Custom size plates can be ordered for larger quantity OEM orders. Custom size plates are not available for prototypes or in small quantities. For small quantity orders Gigahertz-Optik stocks different size standard plates for fast delivery. Contact our sales department to discuss your raw block requirements. Note: Raw plates surfaces must be machined to an optical finish.

ODMP-MP machined plates

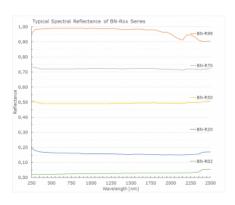
ODMP-MP are plates with surfaces machined to a flat optical finish. Gigahertz-Optik GmbH stocks different size machined plates at a thickness of 10.5mm. For OEM applications custom sizes, shapes and thicknesses are available.

ODMP-MD machined discs

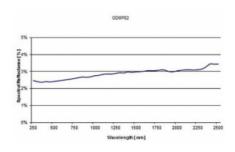
ODM98-MD are plates in disc shape with surfaces machined to a flat optical finish. Gigahertz-Optik GmbH stocks different sizes of 10.5mm thick discs. For OEM applications custom sizes, shapes and thicknesses are supplied.

BN-R-D2 refelectance standards

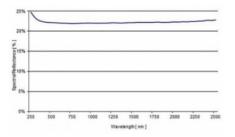
BN-R-D2 Reflectance Standards are ODMP-MD discs supplied in a protective housing with removable protective top. Gigahertz-Optik GmbH stocks reflectance standards with different reflectance values in disc shape. All standards can be supplied with optional spectral reflectance calibration from 250 nm to 2400 nm in 50nm steps. Calibration is done with a double-beam spectrophotometer in 8/d measurement geometry using reflectance standards traceable to national calibration laboratories. For OEM applications custom sizes, shapes and housings are available.



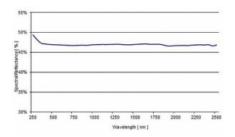
Typical Spectral Reflectance of ODMP02, ODMP-20, ODMP-50 and ODMP-70. ODM98 shown as Reference



Typical Spectral Reflectance of ODMP02

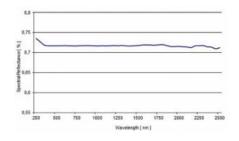


Typical Spectral Reflectance of ODMP20 Material



Typical Spectral Reflectance of ODMP50





Typical Spectral Reflectance of ODMP70

Purchasing information

| Article-Nr | Modell | Description |
|------------|-------------|--|
| Product | | |
| 15298163 | ODMP70-B01 | Raw block material; reflectance 70%; d52mmx100mm |
| 15298156 | ODMP50-B01 | Raw plate material; reflectance 50 %; d52mmx100mm |
| 15298149 | ODMP20-B01 | Raw block material;reflectance 20 %; d52mmx100mm |
| 15298157 | ODMP70-P01 | Raw plate material; reflectance 70 %; 305mmx305mmx12mm |
| 15298150 | ODMP50-P01 | Raw plate material; reflectance 50 %; 305mmx305mmx12mm |
| 15298150 | ODMP20-P01 | Raw plate material; reflectance 20 %; 305mmx305mmx12mm |
| 15298158 | ODMP70-MP01 | Plate machined; reflectance 70%; optical finish; 10"x10"x0.41"; 240mmx240mmx10,5mm |
| 15298159 | ODMP70-MP02 | Plate machined; reflectance 70%; optical finisch; 5"x5"x0.41"; 127mmx127mmx10,5mm |
| 15298160 | ODMP70-MP03 | Plate machined; reflectance 70%; optical finish; 2"x2"x0.41"; 50,8mmx50,8mmx10,5mm |
| 15298151 | ODMP50-MP01 | Plate machined; reflectance 50%; optical finish; 10"x10"x0.41"; 240mmx240mmx10,5mm |
| 15298152 | ODMP50-MP02 | Plate machined; reflectance 50%; optical finish; 5"x5"x0.41"; 127mmx127mmx10,5mm |
| 15298153 | ODMP50-MP03 | Plate machined; reflectance 50%; optical finish; 2"x2"x0.41"; 50,8mmx50,8mmx10,5mm |

| Article-Nr | Modell | Description |
|------------|-------------|--|
| 15298144 | ODMP20-MP01 | Plate machined; reflectance 20%; optical finish; 10"x10"x0.41"; 240mmx240mmx10,5mm |
| 15298145 | ODMP20-MP02 | Plate machined; reflectance 20%; optical finish; 5"x5"x0.41"; 127mmx127mmx10,5mm |
| 15298146 | ODMP20-MP03 | Plate machined; reflectance 20%; optical finish; 2"x2"x0.41"; 50,8mmx50,8mmx10,5mm |
| 15298363 | ODMP02-MP01 | Plate machined; reflectance 2%; optical finish; 10"x10"x0.41"; 240mmx240mmx10,5mm |
| 15298364 | ODMP02-MP02 | Plate machined; reflectance 2%; optical finish; 5"x5"x0.41"; 127mmx127mmx10,5mm |
| 15298365 | ODMP02-MP03 | Plate machined; reflectance 2%; optical finish; 2"x2"x0.41"; 50,8mmx50,8mmx10,5mm |
| 15298161 | ODMP70-MD01 | Disc machined; reflectance 70%; optical finish; 2"diax0.41"; d50,8mmx10,5mm |
| 15298154 | ODMP50-MD01 | Disc machined; reflectance 50%; optical finish; 2"diax0.41"; d50,8mmx10,5mm |
| 15298147 | ODMP20-MD01 | Disc machined, reflectance 20%; optical finish; 2"diax0.41"; d50,8mmx10,5mm |
| 15298364 | ODMP02-MD01 | Disc machined; reflectance 2%; optical finish; 2"diax0.41"; d50,8mmx10,5mm |