





Amorphous Materials Sensor Lenses

Recent years have witnessed the rise in the use of passive IR devices to measure temperature in a non contact manner. Leaders in the field such as Raytek, Linear Labs, or Anafaze have manufactured thousands of such units. Amorphous Materials has supplied the small (1" diameter) short focal length (1-2") glass lenses used to collect and focus the infrared radiation on the detector. The lenses are plano/convex. They are individually generated, lapped and polished to meet stringent quality standards. The measured transmission for uncoated lenses is 69%, 1 to 12 μ m. Focal length is guaranteed to 1-2 %. The extreme chemical inertness of AMTIR-1 glass prevents deterioration in hostile environments due to heat or chemicals as occurs when plastic lenses or reflecting mirrors are used. Compact designs are possible when the small (ct = 0.15") lens is used to replace the more bulky reflecting mirrors. With small investments in tooling, Amorphous Materials is free to provide lenses tailored to meet your system design. For production quantities (100 or more) the lenses are available in USA uncoated for as low as \$35 each. Your inquiries are invited.

			
1" AMTIR-1 coated	1" AMTIR-1 with hole	1" AMTIR-1 uncoated	3/4" AMTIR-1 uncoated

PLANO / CONVEX LENSES			
MATERIAL	DIAMETER +.000-.010	FOCAL LENGTH (NOMINAL)	CT +.005-.005
AMTIR-1	.750"	.904"	.133"
AMTIR-1	.750"	.960"	.142"
AMTIR-1	.750"	1.15"	.117"
AMTIR-1	1.00"	1.00"	.145"
AMTIR-1	1.00"	1.50"	.130"
AMTIR-1	1.00"	2.00"	.120"
PLANO / CONVEX LENSES			
MATERIAL	DIAMETER +.000-.010	FOCAL LENGTH (NOMINAL)	CT +.005-.005

As ₂ S ₃	.750"	.904"	.133"
As ₂ S ₃	.750"	.960"	.142"
As ₂ S ₃	.750"	1.15"	.117"
As ₂ S ₃	1.00"	1.00"	.145"
As ₂ S ₃	1.00"	1.50"	.130"
As ₂ S ₃	1.00"	2.00"	.120"

* \$300 minimum order if desired focal length is not in inventory

1.534" FOCAL LENGTH LENSES

