Microwatt APPLICATIONS
Making Light, Work

Standard Available Gas Sensor Filters

The choice of IR filter including the center wavelength (CWL) the optical bandwidth (HPBW), the minimum transmission and blocking are very dependent on the gas to be detected, the optical system in which these detectors will be used and the performance over the required temperature range.

In particular the filter's band shape, the filter's substrate material, and HPBW are performance drivers that must be considered in any gas sensor design.

When comparing detectors from different suppliers the filters should have the same specifications as this can greatly affect the evaluation.

MWA has selected a few filters which we have found to work in many designs. (This doesn't mean that these are optimized for all designs). You should consult with the factory about your specific application before choosing any of the standard filters we have available from the following list.

Type	Gas	CWL	HPBW	T	Blocking
-01	Ref	3.95±.05um	90±20nm	>75%	UV, Vis, to >7.5um
-02	HC	3.325±.05um	160±30nm	>75%	UV, Vis, to >7.5um
-03	CO2	4.26±.05um	155±30nm	>75%	UV, Vis, to >7.5um
-04	CO2	4.43±.05um	90±20nm	>70%	UV, Vis, to 10.5um
-05	CO2	4.26±.05um	180±30nm	>75%	UV, Vis, to >7.5um
-06	CO	4.66±.05um	180±30nm	>75%	UV, Vis, to >7.5um
-07	NOx	5.30±.05um	180±30nm	>75%	UV, Vis, to >7.5um
-08	SO2	7.3 ±.04um	200±30nm	>70%	UV, Vis, to >9.3um
-09	SF6	10.56 ±.06um	370±50nm	>70%	UV, Vis, to >15um

(Filters for Anesthesia and Refrigerant Gases Are Also Available)

We will also install filters which are furnished by the user (CSM). The required dimensions for dual channel (TO5/39) are 3.0 mm x 2.4 mm (+0.0/-0.1) x 0.5 mm, for single channel 4X18 (TO18/46) are 2.8 mm (±0.1) x 2.8 mm (±0.1) x 0.5 mm and for standard 44XX quads (TO8) are 3.1 mm (±0.1) x 3.1 mm (±0.1) x 1.0 mm max. (We can also cut most filters to size if requested.)

Please feel free to contact us to discuss your particular requirement. We work with many filter suppliers and we will work with you to source and supply the best filter for your application.