Mercury Cadmium Telluride

SPECIFICATIONS FOR STANDARD DETECT

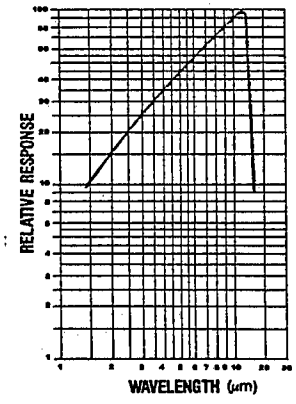
InfraRed ASSOCIATES, Inc. 1000 Route #130, Cranbury, NJ 08512 (609) 395-7600 Telex 642282

8-13 microns

MODEL	SIZE (inches)	D* (cm Hz½/watt)	TIME CONSTANT (nanoseconds)
HCT 100	.001 to .100	$\geq 4 \times 10^{10}$	~400
HCT-90	.001 to .040	$\geq 2 \times 10^{10}$	~300
HCT-80	.060 to .100	$\geq 2 \times 10^{10}$	~300
HCT-70	.001 to .040	$\geq 1 \times 10^{10}$	~200
HCT-60	.060 to .100	$\geq 1 \times 10^{10}$	~200
HCT-55	.001 to .100	$\geq 5 \times 10^{9}$	~100
HCT-50	.001 to .100	$\geq 3 \times 10^{9}$	≤ 50
HCT-40	.001 to .100	$\geq 5 \times 10^{9}$	———

- ...Tolerance on sizes under .040, ± 10% to a minimum of .0003
- ...Tolerance on sizes over .040, ± 5%
- ...All D* Values are shown D* (10 KHz, 1, 60°)
- ...Packaging options include flatpaks, side or endlooking metal dewars

The above specifications represent IRA's standard product line only. Information on custom detectors and arrays is available upon request.



Photoconductive HgCdTe detectors fabricated by Infrared Associates, Inc. and optimized for operation in the 8-13 micron region are finding extensive use in the areas of thermal imaging, medical thermography, laser detection, analytical instruments, missile guidance, etc. These devices represent the state-of-the-art and routinely achieve BLIP or near BLIP performance.

In addition to the standard sizes available from stock, custom configurations are available. The HgCdTe detectors can be supplied in either our standard vacuum housings or in those designed to customer specifications.

Low noise preamplifiers having integral bias circuits are available to achieve optimum signal-to-noise ratio. Coupling these detectors with matched, boosted preamplifiers allows a flat response to 15MHz to be achieved.