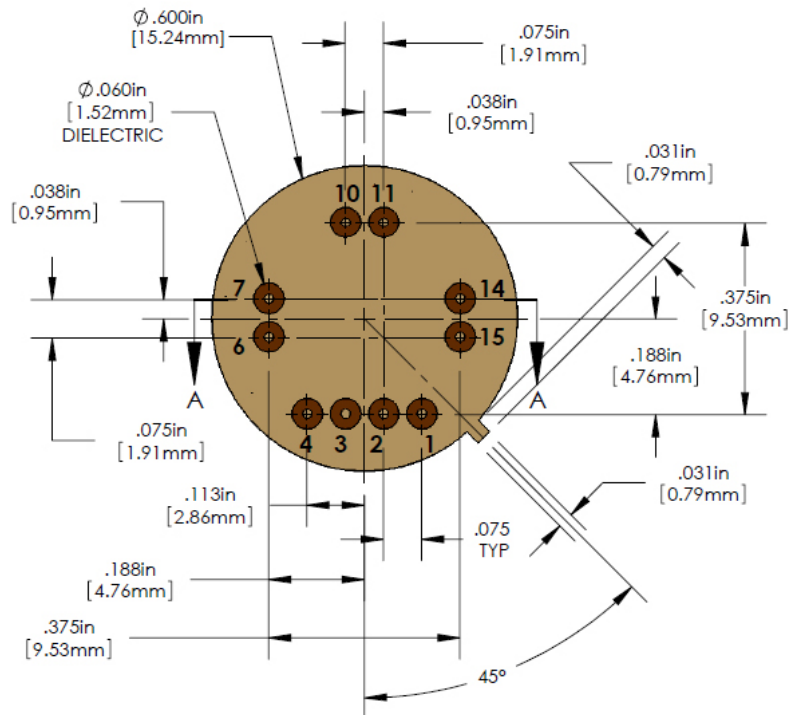


PbSe Multicolor Detector with Peltier MBXT1S-18T-4

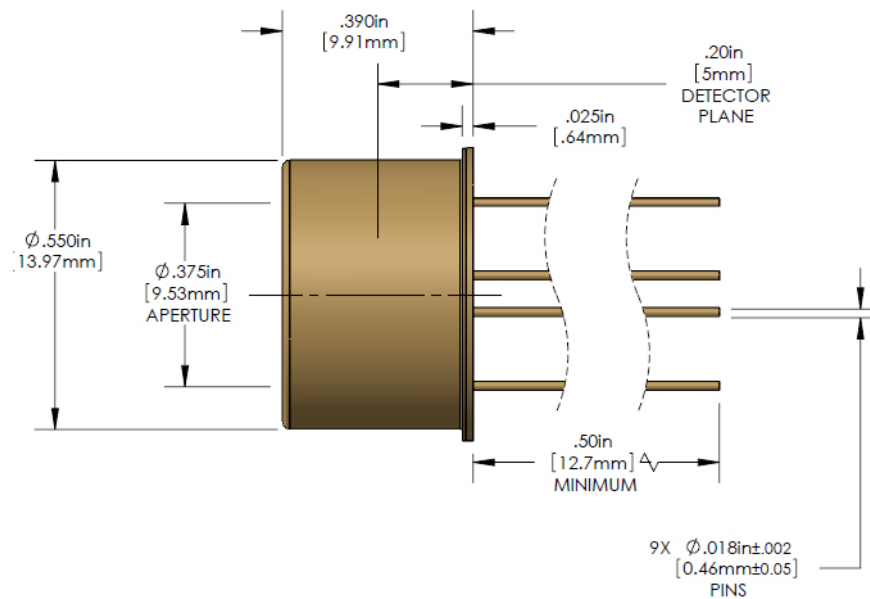
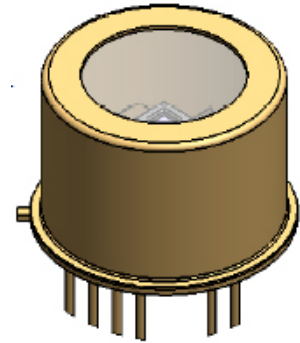
MBXT1S-18T-4 Specifications

Model #	Part #	Element Size (mm)	Op. Temp. (°C) ³	Wave-length (pk signal, μm)	D* (cm Hz ^{1/2} /W)		Responsivity (λ _{pk} , 650Hz, V/W)		Dark Resistance (@23°C, MΩ/sq)	Time Constant (ms)	ΔT at max cool (°C)	Std Pkg (TO)
					(λ _{pk} , 1000Hz, 1Hz)	(500K, 1000 Hz, 1Hz)	Min	Typ				
MBXT1 Series - One-stage (1.2 W) TE cooled PbSe detectors ^{1, 2, 3}												
BXT1-18T	40396	1x1	-25	4.2 typ	1.4x10 ¹⁰ min	1.9x10 ⁹ min	4.0 x10 ⁴	6.0 x10 ⁴	0.5 - 10.0	6 typ	45 min	8
					2.8x10 ¹⁰ typ	3.9x10 ⁹ typ			4.0 typ	12 max	50 typ	



Notes:

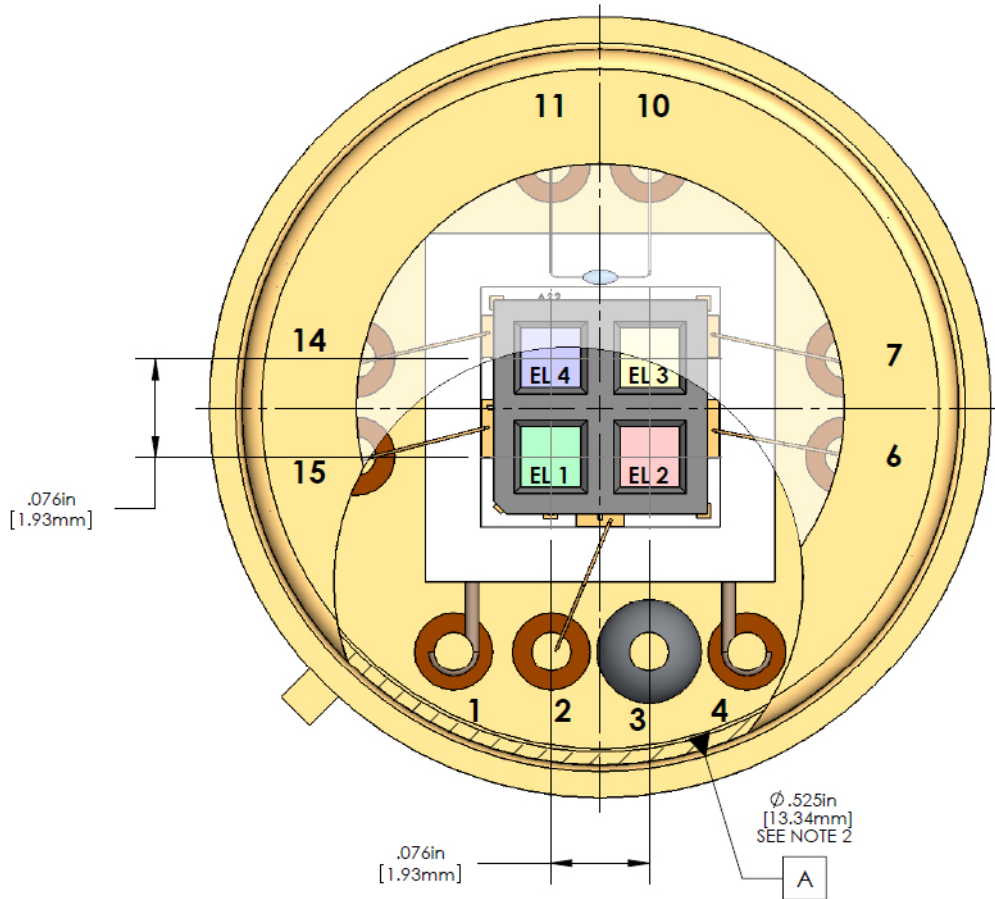
1. See sheet 3 for element alignment & fov detail.
2. Position and mount detector using rotation Angle and center within .010" true position of datum a.
3. See sheet 4 for filter mechanical outline for customer furnished material.
4. Filter x, y dimensions are approximate. Final values tbd.
5. Filter wavelength & material to be customer's choice.



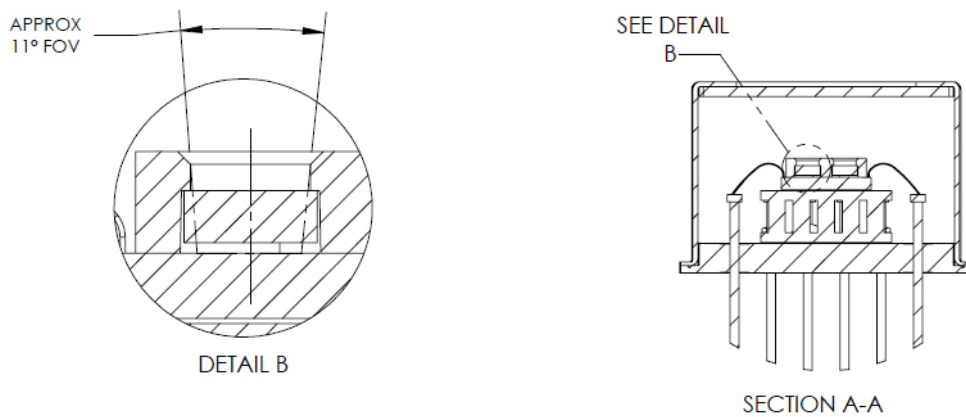
PIN FUNCTION TABLE

PIN NO.	FUNCTION	FILTER
1	TE Cooler (-)	
2	Common	
3	Case Ground	
4	TE Cooler (+)	
6	Element 2	3.85 μm
7	Element 3	4.26 μm
10	Thermistor	
11	Thermistor	
14	Element 4	4.60 μm
15	Element 1	3.34 μm

Element Alignment



Element FOV



CFM, Filter, Mech Outline

