

Multi-Channel Thermopile Selection Table

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Thermopile Detector Model	Multi-Channel Thin Film Based Thermopiles							Multi-Channel Silicon Based Thermopiles							Units
	DR26	DR34	TM34	T34	DR46	2M QUAD	10 channel	ST60R DUAL	ST60R QUAD	ST150R DUAL	ST150R QUAD	SLA32	SA 32x32		
Active Area size	2 x .6	3.16 x .4	3.16 x .4	3.16 x .4	4 x .6	2 x 2	3.16 x .4	.61 x .61	.61 x .61	1.5 x 1.5	1.5 x 1.5	.05 x .65	.2 x .2	mm	
Element Area	1.2	1.264	1.264	1.264	2.4	4	1.264	0.37	0.37	2.25	2.25	0.0325	0.04	mm ²	
Number of Junctions	26	40	40	40	50	48	40	80	80	120	120	74	28	Junctions	
Number of Channels	2	2 Ch. or 1 cmpsatd	3	3 cmpsatd	2 Ch. or 1 cmpsatd	4	10	2	4	2	4	2 x 16 staggered	1024	Channels	
Output Voltage	54	115	115	115	210	250	115	62	62	230	230	14.8	4.0	μV	
Responsivity	13.6	27.6	27.6	27.6	26.5	18.9	27.6	50.5	50.5	31.0	31.0	138	30	V/W	
Resistance	5.5	8	8	8	10	10	8	60	60	75	75	76	60	kΩ	
Temperature Coefficient of Responsivity	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36	-0.36	-0.01	-0.01	-0.01	-0.01	-0.01	-0.01	%/°C	
Temperature Coefficient of Resistance	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	-0.2	0.11	0.11	0.11	0.11	0.11	0.11	%/°C	
Noise Voltage	9.5	11.4	11.4	11.4	12.8	12.8	11.4	33.1	33.1	35.0	35.0	35	31	nV/√Hz	
Noise Equivalent Power	0.7	0.42	0.42	0.42	0.48	0.68	0.42	0.62	0.62	1.13	1.13	0.26	1.0	nW/√Hz	
Detectivity	1.6	2.7	2.7	2.7	3.2	3.0	2.7	1.0	1.0	1.3	1.3	0.7	0.2	10 ⁸ cm ² /Hz/W	
Time Constant	38	38	38	38	40	85	38	18	18	38	38	7	6	ms	
Field of View	NA	NA	NA	NA	NA	NA	NA	15°/47°	15°/47°	27°/99°	22°/85°	NA	NA	Degrees	
Package Type	TO-5	TO-5 w/ 5 pins	TO-8 w/ 12 pins	TO-8 w/ 12 pins	TO-8 w/ 3 or 5 pins	TO-8 w/ 12 pins	TO-8 w/ 12 pins	TO-5	TO-5	TO-5	TO-8	Flat Pack .97" x 1.27"	TBD		
Element Matching	5	5	5	5	5	5	10	5	5	5	5	5	15	%	
Element Separation	1.1	1.8	NA	NA	2.0	4.57	1.82 & 4.28	2.08	2.08	3.30	3.3	0.31	0.364	mm	

Specifications apply at 23°C with KBr Window and Argon encapsulating gas, except where noted on individual data sheet (models: ST60/ST60R, ST150, SLA32).
Test Conditions: 500K Blackbody source; Detector active surface 10cm from 0.6513cm Diameter Blackbody Aperture. H=330μW/cm²

See Specific Data Sheets and Drawings for Details.