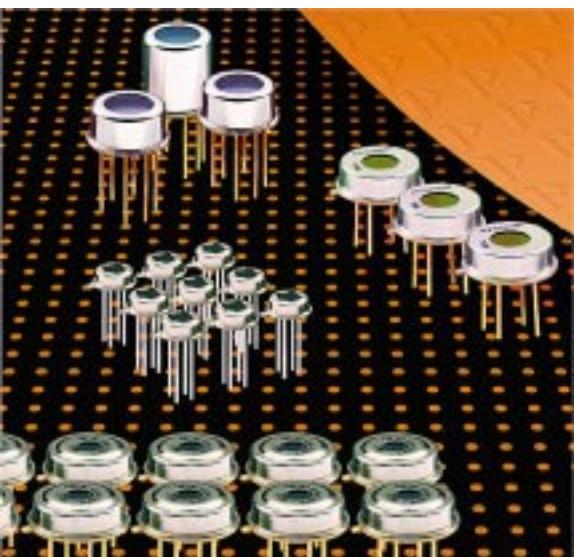
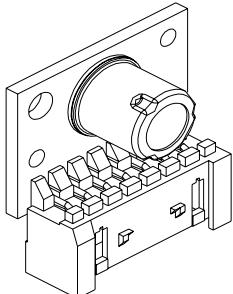


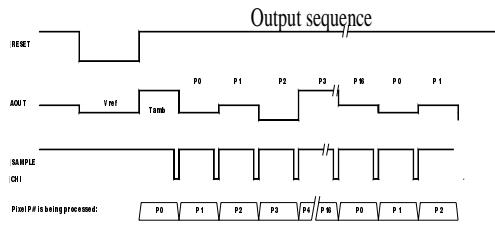
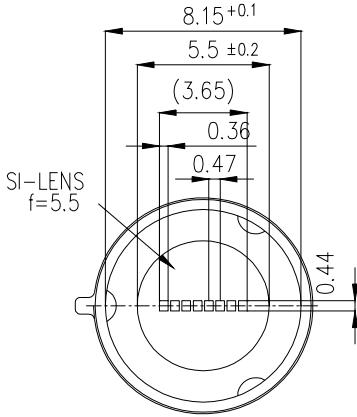
## Thermopile Infrared Detectors

**Linear Array Module      TPLM 086 L5.5****Thermopile Linear Array with 8 Elements****Integrated Optics, Multiplexer, Amplifier and Reference****Plug-In Module with Stored Calibration Data****Designed for Industrial Temperature Measurements**

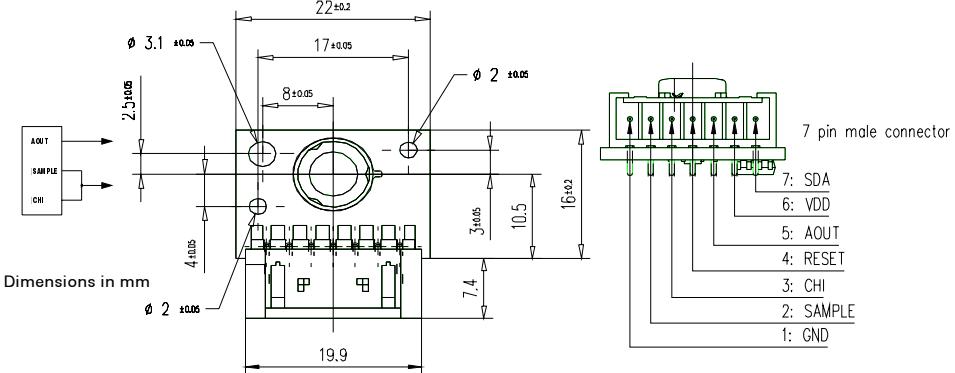
The integrated ThermoPile Linear Array Sensor consists of a 8-elements thermopile chip connected to a multiplexing signal conditioning circuit. The sensor is further equipped with an internal temperature sensor for correct target temperature determination. All analogue signals, including the ambient temperature, are given out in a fixed frame, containing the information in one serial stream. Lenses for different field of views are available on demand. The sensor in a TO-5 housing is mounted on a small pcb with calibration data for this specific sensor stored in an E<sup>2</sup>PROM.



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Parameters	TPLM 086L 5.5	typical	units	condition
<b>Field of View</b>	41	°		f/1, f = 5.5mm
<b>Output Voltage</b>	0.95	V		T <sub>BB</sub> =80°, T <sub>amb</sub> =20°
<b>Output Noise</b>	0.4	mV/√Hz		0.5...20Hz
<b>Object Temp.</b>	-20	100	°C	
<b>Operating Voltage V<sub>DD</sub></b>	5	V		
<b>Operating Current</b>	1	mA		
<b>Zero Signal Offset V<sub>ref</sub></b>	V <sub>DD</sub> /2	V		
<b>Output Resistance</b>	200	Ω		
<b>Power up Time</b>	0.3	s		
<b>Sample Frequency</b>	3	kHz		
<b>Storage Temperature</b>	-40	100	°C	non permanent
<b>Operating Temperature</b>	-20	100	°C	
<b>Temperature Ref Slope S<sub>T</sub></b>	10	mV/K	V <sub>Temp</sub> =S <sub>T</sub> T <sub>amb</sub> /K+V <sub>0</sub>	
<b>Temperature Ref Offset V<sub>0</sub></b>	0	mV		



Europe:  
**PerkinElmer** Optoelectronics GmbH  
Wenzel Jaksch Str 31  
Wiesbaden / Germany  
Phone +49(0)611 492 0  
Fax +49(0)611 492 170

USA:  
**PerkinElmer** Optoelectronics  
2175 Mission Colledge Blvd  
Santa Clara, CA 95054  
Phone +408 565 0830  
Fax +408 565 0703

Asia:  
**PerkinElmer** Optoelectronics  
47, Ayer Rajah Crescent #06-12  
Singapore 139947  
Phone +65 775 2022  
Fax +65 775 1008