



**FEATURES**

- Ambient temperature operation
- No bias required
- Short time constant
- No flicker noise
- Operation from DC to VHF
- Perfect match to fast electronics
- Wide dynamic range
- Large area devices
- Low cost
- Prompt delivery
- Custom design upon request

**DESCRIPTION**

The PVM- $\lambda_{opt}$  photodetectors series ( $\lambda_{opt}$  - optimal wavelength in micrometers) feature IR multiple heterojunction photovoltaic detector. The devices are optimized for the maximum performance at  $\lambda_{opt}$ . Highest performance and stability are achieved by application of variable gap (HgCd)Te semiconductor, optimized doping and sophisticated surface processing. Standard detectors are available without window in TO-39 or BNC based package. Various windows, other packages and connectors are available upon request.

**SPECIFICATION**

**@20°C**

CHARACTERISTICS	UNITS	PVM-8	PVM-10.6
$\lambda_{opt}$	μm	8	10.6
Detectivity <sup>1)</sup> :			
@ $\lambda_{peak}$	cmHz <sup>1/2</sup> /W	$\geq 1.2 \times 10^8$	$\geq 2 \times 10^7$
@ $\lambda_{opt}$		$\geq 6 \times 10^7$	$\geq 1 \times 10^7$
Responsivity - Width Product @ $\lambda_{opt}$	A×mm/W	$\geq 0.008$	$\geq 0.002$
Time constant	ns	$\leq 4$	$\leq 1.5$
Resistance	Ω	50 to 300	20 to 150
Operating temperature	K	~300	
Acceptance angle, F/#	deg, -	>90, 0.71	

<sup>1)</sup> Data sheet states minimum guaranteed D\* values for each detector model. Higher performance detectors can be provided upon request.

Type	Length [mm]									
	0.025	0.05	0.1	0.2	0.25	0.5	1	2	3	4
PVM-8	O	O	X	X	O	O	X	X	X	X
PVM-10.6	O	O	X	X	O	O	X	X	X	X

X – standard detectors

O – detectors available on request, parameters may vary from these in data sheets