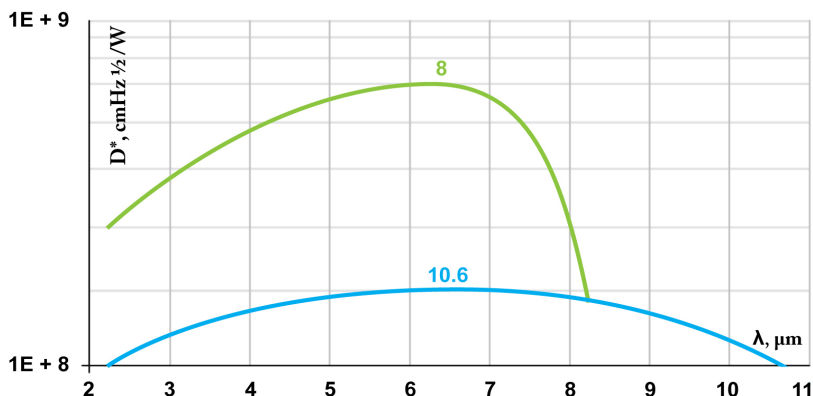


PVMI SERIES

8-11 μm IR PHOTOVOLTAIC MULTIPLE JUNCTION DETECTORS OPTICALLY IMMERSED



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
- Custom design upon request

DESCRIPTION

The PVMI- λ_{opt} photodetectors series (λ_{opt} - optimal wavelength in micrometers) feature IR multiple heterojunction immersed photovoltaic detector. The devices are optimized for the maximum performance at λ_{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	PVMI-8	PVMI-10.6
λ_{opt}	μm	8	10.6
Detectivity ¹⁾ :			
@ λ_{peak}	$\text{cmHz}^{1/2}/\text{W}$	$\geq 6 \times 10^8$	$\geq 2 \times 10^8$
@ λ_{opt}		$\geq 3 \times 10^8$	$\geq 1 \times 10^8$
Responsivity - Width Product @ λ_{opt}	$\text{A} \times \text{mm}/\text{W}$	≥ 0.04	≥ 0.01
Time constant	ns	≤ 4	≤ 1.5
Resistance	Ω	50 to 300	20 to 150
Operating temperature	K	~300	
Acceptance angle, F/#	deg, -	36, 1.62	

¹⁾ 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
PVMI-8					O	O	X	X		
PVMI-10.6					O	O	X	X		

X – standard detectors

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

