

**UV-VIS/NIR (200nm - 2.6µm)**

Type	Part number	Active Area	Operating Wavelength (nm)	Shunt Resistance (Ω)	Shunt Capacitance (pF), typ	Responsivity (A/W)	NEP (W/Hz <sup>1/2</sup> )
Extended InGaAs	IGA1.9-010	1mm dia.	1200-2100	> 100k	100	1.2	< 4.0 x 10 <sup>-13</sup>
	IGA1.9-010-TE2	1mm dia.	1200-2100	5M	100	1	-
	IGA2.2-003	0.3mm dia.	1200-2600	30k	40	1.1	< 7.0 x 10 <sup>-13</sup>
	IGA2.2-010	1mm dia.	1200-2600	3k	300	1.1	< 2.0 x 10 <sup>-12</sup>
	IGA2.2-010-TE2	1mm dia.	1200-2600	60k	120	1	-
	IGA2.2-030	3mm dia.	1200-2600	≥ 300	2000 (0V)	1.1	< 7 x 10 <sup>-12</sup>
Germanium	G-010	1mm dia.	800-1800	200k	1500	0.9	< 3 x 10 <sup>-13</sup>
	G-010-TE2	1mm dia.	800-1800	100M	1500	0.9	1.5 x 10 <sup>-14</sup>
	G-020	2mm dia.	800-1800	≥ 90k	9000	0.9	< 4.5 x 10 <sup>-13</sup>
	G-020-TE2	2mm dia.	800-1700	50M	9000	0.9	2.0 x 10 <sup>-14</sup>
	G-030	3mm dia.	800-1800	≥ 40k	13000	0.9	< 7 x 10 <sup>-13</sup>
	G-030-TE2	3mm dia.	800-1700	10M	13000	0.9	4x 10 <sup>-14</sup>
	G-050	5mm dia.	800-1800	10k min ; 15k typ	30000	0.9	< 1.5 x 10 <sup>-12</sup>
	G-050-TE2	5mm dia.	800-1700	5M	30000	0.9	6.0 x 10 <sup>-14</sup>
	G-100	10mm sq	1000-1800	2k min ; 4k typ	30000	0.9	< 3.5 x 10 <sup>-12</sup>
	G-100-TE2	10mm sq	800-1800	50k	30000	0.9	< 7.0 x 10 <sup>-13</sup>
	G-130	13mm dia.	1000-1800	1k min ; 2k typ	40000	0.9	< 5 x 10 <sup>-12</sup>
	G-130-TE2	13mmx10mm	1000-1800	25k	40000	0.9	< 1.0 x 10 <sup>-12</sup>

**NIR-MWIR (1.0 to 5.5µm)**

Detectors included in this category are InAs and InSb photodiodes as well as PbS, PbSe and HgCdTe photoconductors that cover the 1 to 5.5 micron spectral range. Room temperature, TE-Cooled and Cryogenic packages are utilized, depending on sensitivity requirements. A variety of standard and custom sizes are available.



Type	Part number	Active Area	Operating Wavelength (nm)	Shunt Resistance (Ω)	Shunt Capacitance (pF), typ	Responsivity (A/W)	NEP (W/Hz <sup>1/2</sup> )
InAs	IA-010	1mm dia.	1000-3400	≥ 15	400	1	33 x 10 <sup>-12</sup>
	IA-010-TE2/TO8	1mm dia.	1000-3400	500	450	1.4	-
	IA-020	2mm dia.	1000-3400	≥ 10	1200	0.8	5.5 x 10 <sup>-11</sup>
	IA-020-TE2/TO8	2mm dia.	1000-3400	100	1200	1.5	-

### NIR-MWIR (1.0 to 5.5 $\mu$ m)

Type	Part number	Active Area	Operating Wavelength (nm)	Responsivity @ $\lambda_p$ (V/W)	Detectivity (cm-Hz <sup>1/2</sup> /W)	Dark Resistance (M $\Omega$ )	Detector Resistance (M $\Omega$ )	Shunt Resistance
PbS	PBS-010	1mm sq	1000-2800	$\geq 10^5$	$\geq 1 \times 10^{11}$	0.3-1.5	-	-
	PBS-010-TE1	1mm sq	1000-2800	$> 4 \times 10^5$	$> 2 \times 10^{11}$	-	0.7-3.0	-
	PBS-010-TE2	1mm sq	1000-2800	$1 \times 10^6$	$3 \times 10^{11}$	-	-	0.5-3.0M $\Omega$
	PBS-020	2mm sq	1000-2800	$2 \times 10^5$	$1 \times 10^{11}$	0.5-2.0	-	-
	PBS-020-TE1	2mm sq	1000-2800	$> 4 \times 10^5$	$> 1.5 \times 10^{11}$	-	0.7-3.0	-
	PBS-020-TE2	2mm sq	1000-2800	$5 \times 10^5$	$2.5 \times 10^{11}$	-	-	0.5-3.0M $\Omega$
	PBS-030	3mm sq	1000-2800	$1 \times 10^5$	$1 \times 10^{11}$	0.5-2.0	-	-
	PBS-030-TE1	3mm sq	1000-2800	$2 \times 10^5$	$> 2 \times 10^{11}$	-	0.7-4.0	-
	PBS-030-TE2	3mm sq	1000-2800	$3 \times 10^5$	$2.5 \times 10^{11}$	-	-	0.5-3.0M $\Omega$
	PBS-050	5mm sq	1000-2800	$5 \times 10^4$	$0.6 \times 10^{11}$	0.5-2.0	-	-
	PBS-050-TE1	5mm sq	1000-2800	$> 1 \times 10^5$	$> 1.5 \times 10^{11}$	-	0.7-4.0	-
	PBS-050-TE2	5mm sq	1000-2800	$2 \times 10^5$	$2.5 \times 10^{11}$	-	-	0.5-4.0M $\Omega$
	PBS-060	6mm sq	1000-2800	$5 \times 10^4$	$0.6 \times 10^{11}$	0.2-1 $\Omega$	-	-
	PBS-060-TE1	6mm sq	1000-2800	$> 1 \times 10^5$	$> 1.5 \times 10^{11}$	-	0.7-4.0	-
PBS-060-TE2	6mm sq	1000-2800	$2 \times 10^5$	$2.5 \times 10^{11}$	-	-	0.5-3.0M $\Omega$	
PBS-100	10mm sq	1000-2800	10000	$6 \times 10^{10}$	0.5-2.0	-	-	
PbSe	PBSE-010	1mm sq	1000-4500	$\geq 10,000$	$\geq 5 \times 10^9$	0.1-1.0	-	-
	PBSE-010-TE1	1mm sq	1000-4500	$> 2 \times 10^4$	$> 1.5 \times 10^{10}$	-	-	0.4-2.0M $\Omega$
	PBSE-010-TE2	1mm sq	1000-4500	$5 \times 10^4$	$3.0 \times 10^{10}$	-	-	0.5-3.0M $\Omega$
	PBSE-020	2mm sq	1000-4500	$\geq 4000$	$\geq 5 \times 10^9$	0.5	-	-
	PBSE-020-TE1	2mm sq	1000-4500	$> 1 \times 10^4$	$> 1.0 \times 10^{10}$	-	-	0.4-2.0M $\Omega$
	PBSE-020-TE2	2mm sq	1000-4500	$3 \times 10^4$	$2.0 \times 10^{10}$	-	-	0.5-3.0M $\Omega$
	PBSE-030	3mm sq	1000-4500	$\geq 2000$	$\geq 3 \times 10^9$	0.5	-	-
	PBSE-030-TE1	3mm sq	1000-4500	$> 1 \times 10^4$	$> 1.0 \times 10^{10}$	-	-	0.4-2.0M $\Omega$
	PBSE-030-TE2	3mm sq	1000-4500	$2 \times 10^4$	$2.0 \times 10^{10}$	-	-	0.5-3.0M $\Omega$
	PBSE-050	5mm sq	1000-4500	1000	$2 \times 10^9$	0.1-1.0	-	-
	PBSE-050-TE1	5mm sq	1000-4500	$> 3000$	$> 5 \times 10^9$	-	0.5-4.0	-
PBSE-050-TE2	5mm sq	1000-4500	$1 \times 10^4$	$1.0 \times 10^{10}$	-	-	0.5-3.0M $\Omega$	
HgCdTe	MCT4.5-010	1mm sq	1000-4500	200	$1 \times 10^{10}$	50 - 200	-	-
	MCT4.5-010-TE2	1mm sq	1000-4800	1000	$4 \times 10^{10}$	100-300	-	-
	MCT5.0-010	1mm sq	1000-5000	100	$5 \times 10^9$	50 - 200	-	-
	MCT5.0-010-TE2	1mm sq	1000-5400	500	$2 \times 10^{10}$	100-300	-	-
InSb	IS-0025	0.25mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$1.0 \times 10^{11}$	-	-	$> 10$ M
	IS-010	1mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$1.0 \times 10^{11}$	-	-	$> 1$ M
	IS-020	2mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$1.0 \times 10^{11}$	-	-	$> 200$ k
	IS-030	3mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$1.0 \times 10^{11}$	-	-	$> 150$ k
	IS-040	4mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$0.8 \times 10^{11}$	-	-	$> 100$ k
	IS-050	5mm dia.	1000-5500	2.0 @ 5.0 $\mu$ m	$0.8 \times 10^{11}$	-	-	$> 50$ k
	IS-070	7mm dia.	1000-5500	1.8 @ 5.0 $\mu$ m	$0.5 \times 10^{11}$	-	-	$> 10$ k
	IS-100	10mm dia.	1000-5500	1.8 @ 5.0 $\mu$ m	$0.5 \times 10^{11}$	-	-	$> 2$ k

Note : TE cooled series : Thermistor Resistance : 7.5k $\Omega$  (TE1), 40k $\Omega$  (TE2)  
 Cooler current : 0.65A (TE1), 0.6A (TE2)  
 Maximum cooler current : 1A (TE1), 1.25A (TE2)