



InGaAs THERMOELECTRIC COOLED PHOTODIODES

| Model No. | Active Diameter (mm) | Operating Temperature (°C) | Peak Wavelength (typ) μm | Cutoff Wavelength (50%) (typ) (μm) | Responsivity @ λ_{PK} (min/typ) (A/W) | Shunt Resistance (typ) (Ω) | Dark Current (max) (nA) | Capacitance (typ) @ 0V (pF) | Bandwidth w/ 50 Ω @ 0 V (MHz) | Rise time w/ 50 Ω @ 0 V (ns) | NEP @ λ_{PK} typ (W/Hz ^{1/2}) | Linearity (± 0.2 dB @ 0 V) (dBm) | Case Style |
|-----------------|----------------------|----------------------------|-------------------------------------|---|---|-------------------------------------|-------------------------|-----------------------------|--------------------------------------|-------------------------------------|---|---------------------------------------|-------------------|
| GAP1000TE1 | 1 | -10 | 1.52 \pm 0.1 | 1.65 \pm 0.1 | 0.95/1.0 | 5.00E+08 | 3 @ 5 V | 80 | 40 | 8.8 | 5.4E-15 | 10 | TO5/TO37/TO8/TO66 |
| GAP2000TE1 | 2 | | | | | 1.25E+08 | 20 @ 2 V | 300 | 11 | 32 | 1.1E-14 | 8 | |
| GAP3000TE1 | 3 | | | | | 1.10E+08 | 50 @ 2 V | 600 | 5 | 70 | 1.1E-14 | | |
| GAP5000TE1 | 5 | | | | | 2.50E+07 | 100 @ 0.1 V | 1000 | 3 | 117 | 2.4E-14 | | |
| GAP1000TE1/2.05 | 1 | -10 | 1.77 \pm 0.1 | 2.02 \pm 0.1 | 0.9/1.0 | 5.00E+06 | 500 @ 1 V | 500 | 6.4 | 55 | 5.4E-14 | 6 | TO5/TO37/TO8/TO66 |
| GAP2000TE1/2.05 | 2 | | | | | 8.00E+05 | 1100 @ 1 V | 1600 | 2 | 176 | 1.3E-13 | | |
| GAP3000TE1/2.05 | 3 | | | | | 1.40E+05 | 1360 @ 0.5 V | 4000 | 0.8 | 440 | 3.2E-13 | | |
| GAP1000TE1/2.2 | 1 | -10 | 1.97 \pm 0.1 | 2.17 \pm 0.1 | 0.9/1.0 | 5.60E+05 | 1250 @ 1 V | 1000 | 3.18 | 110 | 1.6E-13 | 6 | TO5/TO37/TO8/TO66 |
| GAP2000TE1/2.2 | 2 | | | | | 1.20E+04 | 5000 @ 1 V | 4000 | 0.795 | 440 | 1.1E-12 | | |
| GAP3000TE1/2.2 | 3 | | | | | 4.80E+04 | 6250 @ 0.5 V | 8000 | 0.397 | 881 | 5.5E-13 | | |
| GAP1000TE1/2.6 | 1 | -10 | 2.17 \pm 0.1 | 2.57 \pm 0.1 | 0.9/1.0 | 4.00E+04 | 8000 @ 0.5 V | 1000 | 3.2 | 110 | 6.0E-13 | 6 | TO5/TO37/TO8/TO66 |
| GAP2000TE1/2.6 | 2 | | | | | 1.50E+04 | 32000 @ 0.5 V | 4400 | 0.8 | 440 | 9.8E-13 | | |
| GAP3000TE1/2.6 | 3 | | | | | 5.00E+03 | 50000 @ 0.5 V | 10000 | 0.35 | 1000 | 1.7E-12 | | |

| Model No. | Active Diameter (mm) | Operating Temperature (°C) | Peak Wavelength (typ) μm | Cutoff Wavelength (50%) (typ) (μm) | Responsivity @ λ_P (min/typ) (A/W) | Shunt Resistance (typ) (Ω) | Dark Current (max) (nA) | Capacitance (typ) @ 0V (pF) | Bandwidth w/ 50 Ω @ 0 V (MHz) | Rise time w/ 50 Ω @ 0 V (ns) | NEP @ λ_{PK} typ (W/Hz ^{1/2}) | Linearity (± 0.2 dB @ 0 V) (dBm) | Case Style |
|-----------------|----------------------|----------------------------|-------------------------------------|---|--|-------------------------------------|-------------------------|-----------------------------|--------------------------------------|-------------------------------------|---|---------------------------------------|------------|
| GAP1000TE2 | 1 | -20 | 1.51 \pm 0.1 | 1.64 \pm 0.1 | 0.95/1.0 | 1.00E+09 | 2 @ 5 V | 80 | 40 | 8.8 | 3.7E-15 | 10 | TO8/TO66 |
| GAP2000TE2 | 2 | | | | | 5.00E+08 | 10 @ 2 V | 300 | 11 | 32 | 5.3E-15 | 8 | |
| GAP3000TE2 | 3 | | | | | 2.50E+08 | 20 @ 2 V | 600 | 5 | 70 | 7.5E-15 | | |
| GAP5000TE2 | 5 | | | | | 5.00E+07 | 50 @ 0.1 V | 1000 | 3 | 117 | 1.7E-14 | | |
| GAP1000TE2/2.05 | 1 | -20 | 1.76 \pm 0.1 | 2.01 \pm 0.1 | 0.9/1.0 | 1.00E+07 | 200 @ 1 V | 500 | 6.4 | 55 | 3.7E-14 | 6 | TO8/TO66 |
| GAP2000TE2/2.05 | 2 | | | | | 1.50E+06 | 240 @ 1 V | 1600 | 2 | 176 | 9.6E-14 | | |
| GAP3000TE2/2.05 | 3 | | | | | 3.40E+05 | 700 @ 0.5 V | 4000 | 0.8 | 440 | 2.0E-13 | | |
| GAP1000TE2/2.2 | 1 | -20 | 1.96 \pm 0.1 | 2.16 \pm 0.1 | 0.9/1.0 | 9.80E+05 | 700 @ 1 V | 1000 | 3.18 | 110 | 1.2E-13 | 6 | TO8/TO66 |
| GAP2000TE2/2.2 | 2 | | | | | 1.68E+05 | 2900 @ 1 V | 4000 | 0.795 | 440 | 2.9E-13 | | |
| GAP3000TE2/2.2 | 3 | | | | | 8.40E+04 | 3600 @ 0.5 V | 8000 | 0.397 | 881 | 4.1E-13 | | |
| GAP1000TE2/2.6 | 1 | -20 | 2.16 \pm 0.1 | 2.56 \pm 0.1 | 0.9/1.1 | 8.80E+04 | 3600 @ 0.5 V | 1000 | 3.2 | 110 | 4.0E-13 | 6 | TO8/TO66 |
| GAP2000TE2/2.6 | 2 | | | | | 3.30E+04 | 14500 @ 0.5 V | 4400 | 0.8 | 440 | 6.5E-13 | | |
| GAP3000TE2/2.6 | 3 | | | | | 1.10E+04 | 22700 @ 0.5 V | 10000 | 0.35 | 1000 | 1.1E-12 | | |