# SPD Datasheet

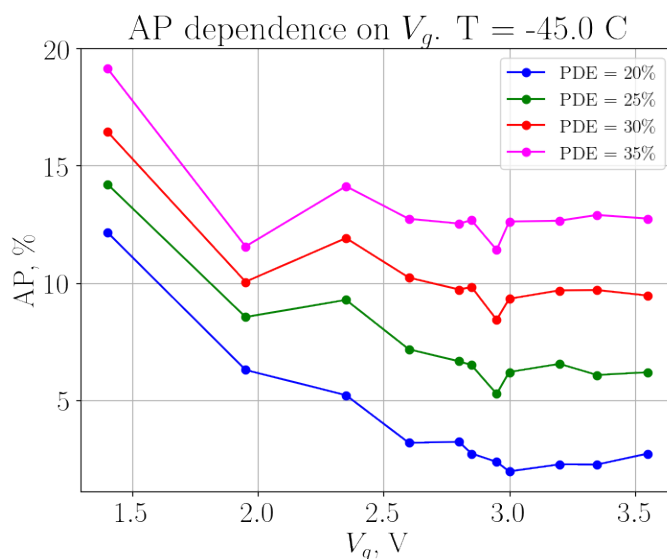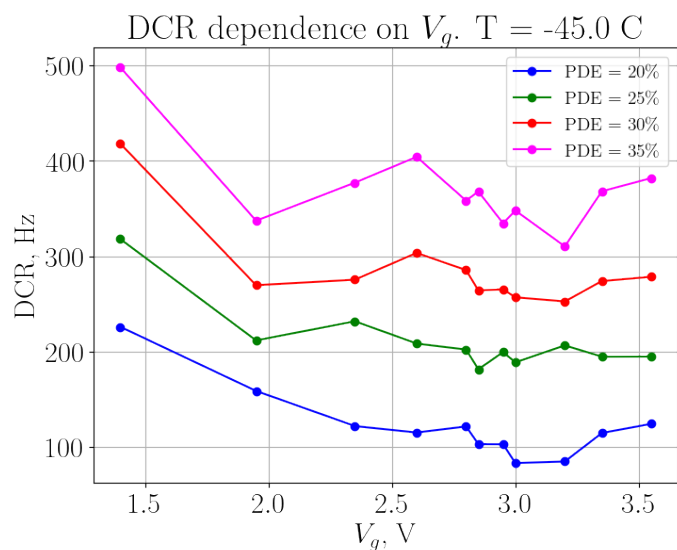SPD type: gated          SPD Name: Timofei          Date: 14.07.2021

Optimal point          T = -45.0 C

| Criterion | PDE, % | DCR, Hz | SNR | AP, % | DT, mus | TR, ps | BIF, % |
|-----------|--------|---------|--------|-------|---------|--------|--------|
| QE = 20 | 20 | 83 | 0.2409 | 1.95 | 4.68 | 400 | 1.7 |
| QE = 30 | 30 | 252 | 0.1188 | 9.67 | 4.64 | 320 | 1.4 |

| Criterion | Vg, V | Vb, V | T, C |
|-----------|-------|-------|------|
| QE = 20 | 3.0 | 64.62 | -45.0 |
| QE = 30 | 3.2 | 65.26 | -45.0 |

## Graphic characteristics representation



SNR heatmap for T = -45.0 C



BIF heatmap for T = -45.0 C



DCR dependence on $V_g$. T = -45.0 C



AP dependence on $V_g$. T = -45.0 C

# SPD Datasheet

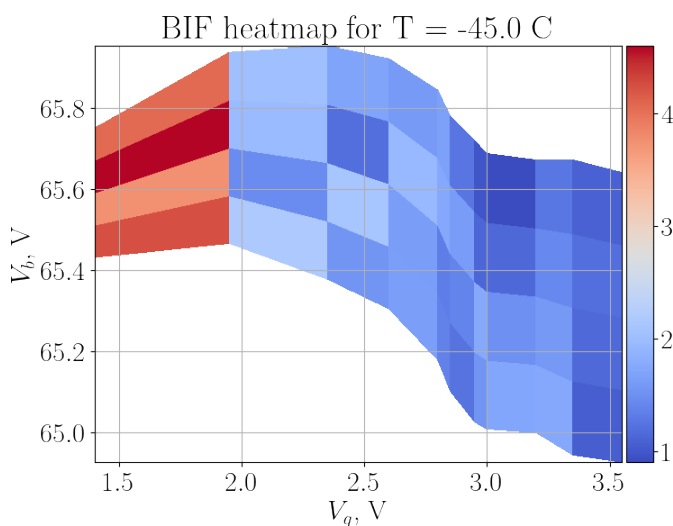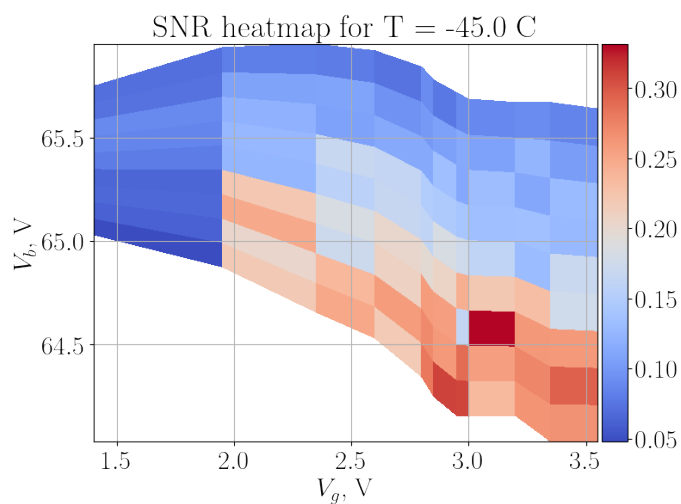SPD type: gated          SPD Name: Timofei          Date: 14.07.2021

Optimal point          T = -40.0 C

| Criterion | PDE, % | DCR, Hz | SNR | AP, % | DT, mus | TR, ps | BIF, % |
|-----------|--------|---------|-----|-------|---------|--------|--------|
| QE = 20 | 20 | 120 | 0.1661 | 2.25 | 4.71 | 520 | 1.4 |
| QE = 30 | 30 | 274 | 0.1096 | 8.15 | 4.81 | 540 | 1.6 |

| Criterion | Vg, V | Vb, V | T, C |
|-----------|-------|-------|------|
| QE = 20 | 2.6 | 65.55 | -40.0 |
| QE = 30 | 1.95 | 66.14 | -40.0 |

## Graphic characteristics representation