



Description

APD3000-UT has a circular ($\Phi 3000 \mu\text{m}$) 7.07mm^2 active area. It is a UV Si Avalanche Photodiode with optimized sensitivity from the UV to visible spectral range.

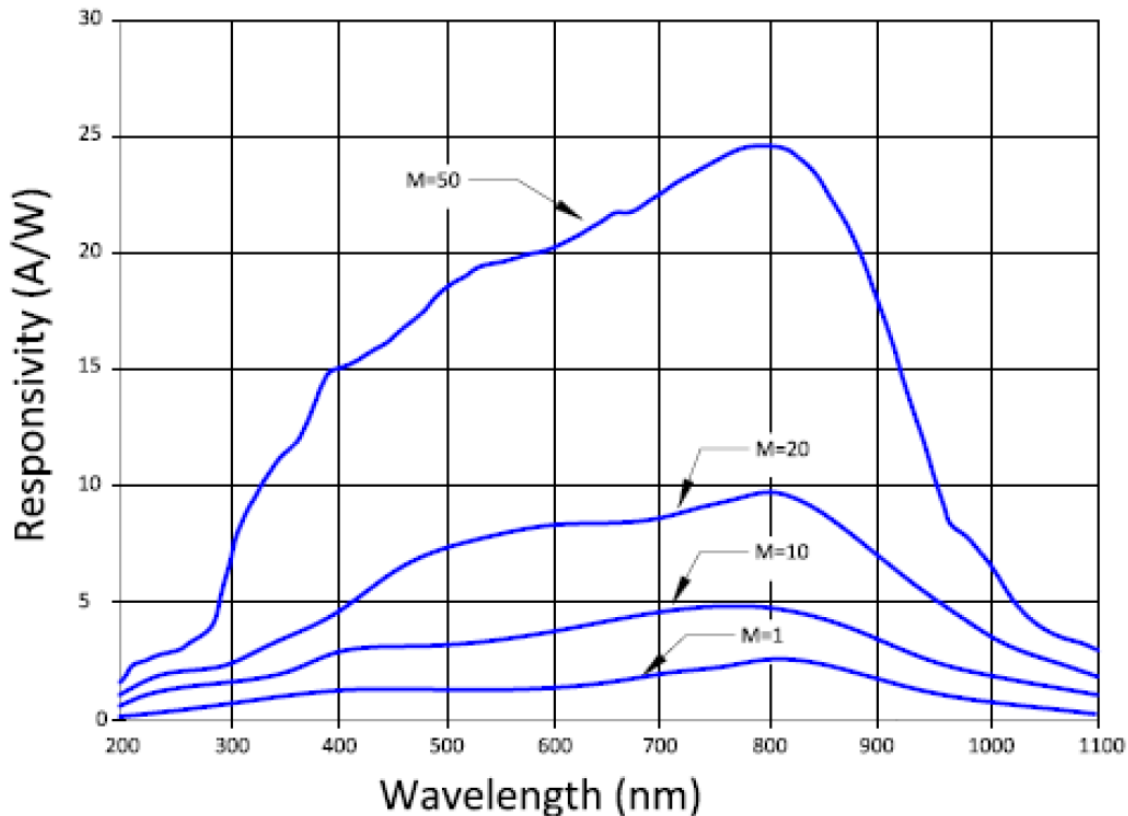
Features

- Top illumination planar APD
- $\Phi 3000 \mu\text{m}$ active area
- High gain at low bias voltage
- Operating temperature range -40 to $+80^\circ\text{C}$

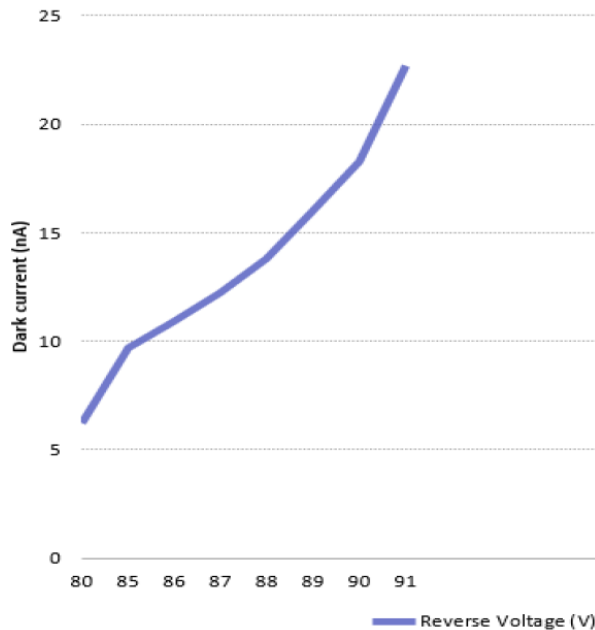
Applications

- Low light level measurements
- Fluorescence measurements
- Analytical instruments
- Medical instruments

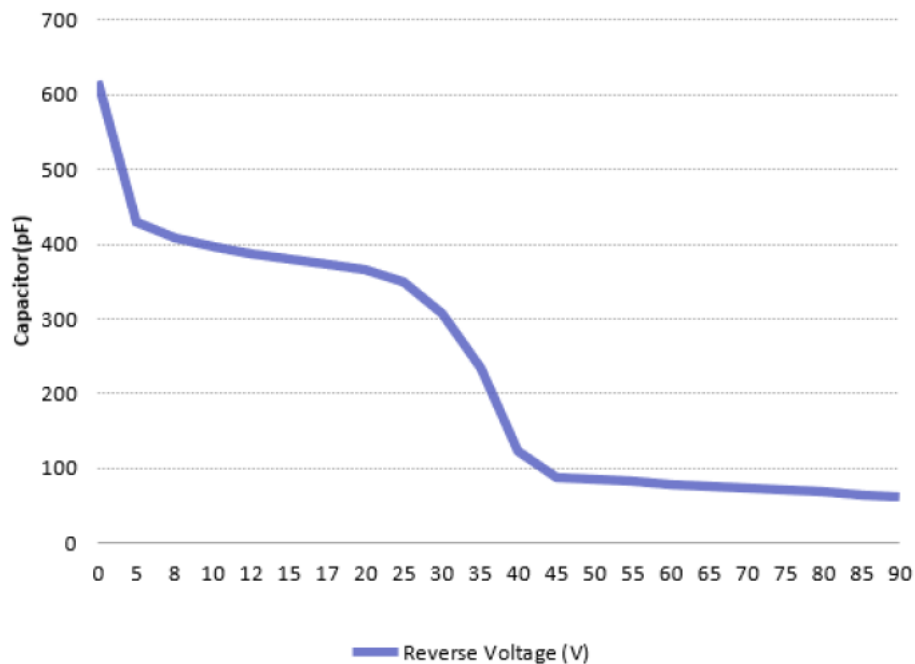
Responsivity vs Wavelength vs M



Dark Current vs Bias Voltage



Capacitance vs Bias Voltage



Electro-optical Characteristics and Maximum Ratings (Ta = +25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Wavelength range	λ		200-1100			nm
Peak wavelength	λ_p		800			nm
Active diameter	ϕ		3000			μm
	A		7.07			mm^2
Dark current	I_D	VR=80V		6.3	35	nA
Junction Capacitance	C	VR=90V, f=1MHz		20		PF
Reverse breakdown voltage	V _{BR}	ID=100 μ A	90	97	110	V
Operating voltage temperature coefficient	δ	Tc=-40~+85°C	0.4			V/°C
Rise time	t _r	M=100, λ = 400nm, 50 Ω		10		ns
Cut-off frequency	BW	-3dB		25		MHz
Maximum multiplication gain	M _{max}	λ =905nm, ϕ_e =1 μ w		100		
Responsivity	Re	λ =355nm, M=100, VR=10V		22		A/W

Absolute Values

Operating Voltage	0,95 * V _{Br}
Forward Current	1mA
Power Dissipation	60mW

