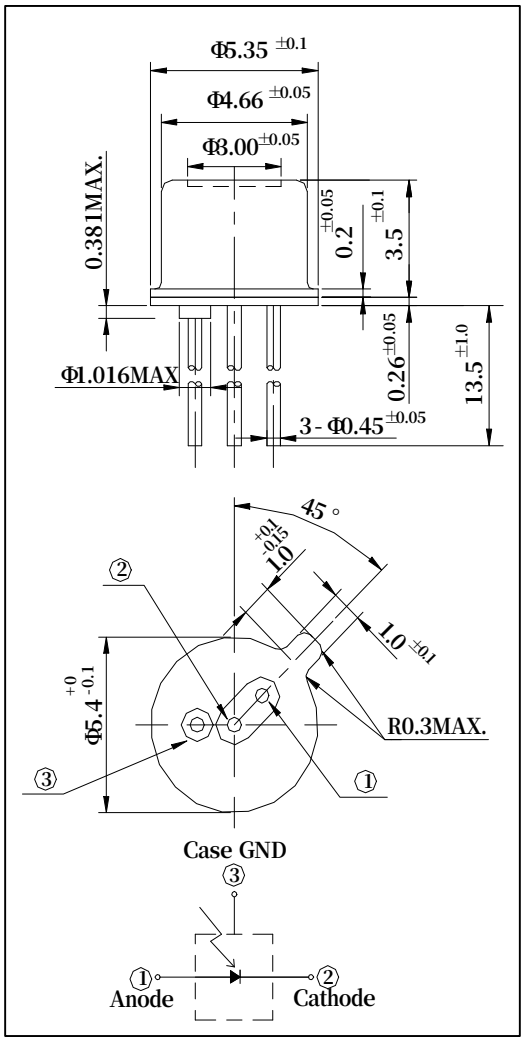
InGaAs PIN Photodiode

KPPF1-LM622

DIMENSION Unit:(㎜)



InGaAs PIN Photodiode is high sensitive and reliable for data and telecommunication applications.

FEATURES

- Industry standard TO-46 package with flat window cap
- Optimized for fiber optic application.
- High coupling efficiency to multi-mode fibers directly.
- Low dark current and low capacitance.

APPLICATIONS

- Optical fiber communications
- Fiber channel
- Gigabit Ethernet

ABSOLUTE MAXIMUM RATINGS

Item	Symbol	Ratings	Unit
Operating Temperature	$T_{opr.}$	-40~+80	℃
Storage Temperature	$T_{stg.}$	-40~+100	℃
Reverse Voltage	V_R	30	V
Reverse Current	I_R	0.5	㎃
Forward Current	I_F	2	㎃

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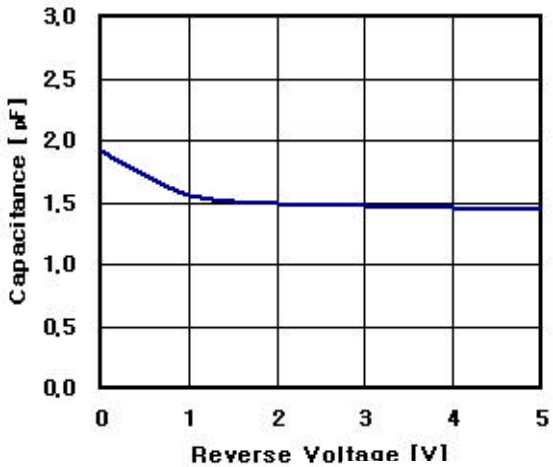
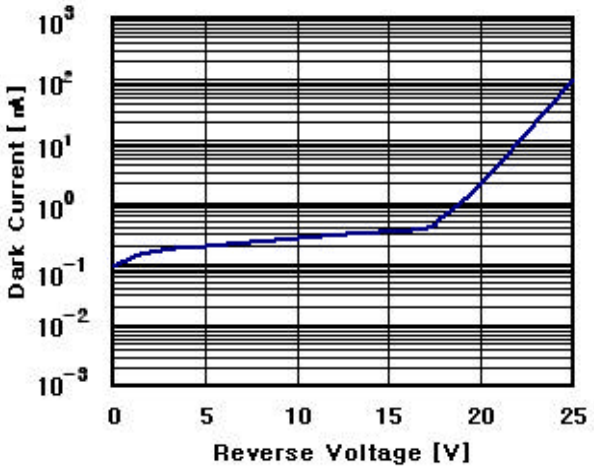
ELECTRO-OPTICAL CHARACTERISTICS

Parameter		Symbol	Min	Typ	Max	Unit	Test Conditions
Active area		-	-	Φ70	-	μm	
Spectral response range		λ	0.9	-	1.7	μm	
Peak sensitivity wavelength		λp		1.55		μm	
Photo sensitivity	λ=1.3μm	S	0.8	0.9	-	A/W	V_R=5V
	λ=1.55μm		0.85	0.95	-		
Dark current		I_{DARK}	-	0.2	2	nA	V_R=5V
3 dB cut-off frequency		f_{-3dB}	1.2			GHz	V_R=5V, R_L=50Ω
Terminal capacitance		Ct	-	1.3	1.8	pF	V_R=5V, f=1MHz

C-V characteristics



Dark Current vs. Reverse Voltage



Dark Current vs. Operating Temperature