

FU-13AP-N

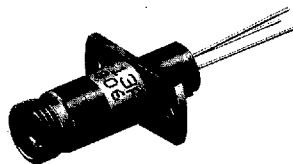
APD Module for Long Wavelength Band

FU-13AP-N is detector module containing highly-reliable InGaAs APD (Avalanche photodiode) module for the long wavelength band (1~1.6 μ m) and has high-speed response.

This module is used as detector for high-speed, long haul optical communication systems.

FEATURES

- High-responsivity
- High-speed response (> 1GHz)
- Low capacitance
- Easy handling

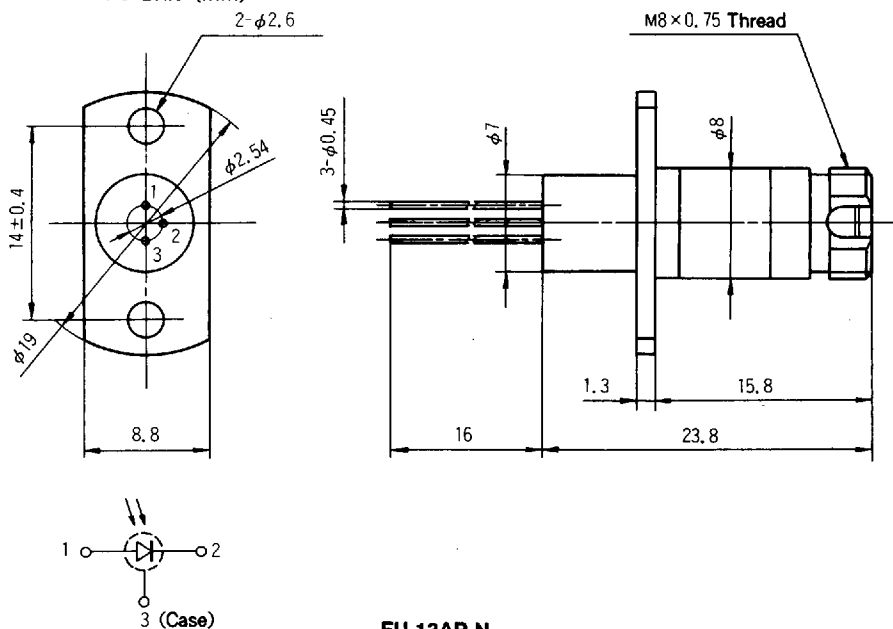


FU-13AP-N

ABSOLUTE MAXIMUM RATINGS (Tc=25°C)

Items	Symbols	Ratings	Units
Reverse current	I_R	500	μ A
Forward current	I_F	2	mA
Operating case temperature	T_c	-30~70	°C
Storage temperature	T_{stg}	-40~70	°C

OUTLINE DRAWINGS Unit (mm)



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APD Module for Long Wavelength Band

CHARACTERISTICS (Tc=25°C, unless otherwise noted)

Items	Symbols	Conditions	Min.	Typ.	Max.	Units
Detection range	-	-	1000~1600			nm
Responsivity (Note 1)	R	$\lambda = 1300\text{nm}, M = 1$ (Note 2)	-	0.8	-	A/W
		$\lambda = 1550\text{nm}, M = 1$ (Note 2)	-	0.93	-	
Breakdown voltage	V _{BR}	I _D = 100 μ A	-	70	-	V
Breakdown voltage at case temperature	V _{BRt}	I _D = 100 μ A, T _c = -30~70 °C	-	0.17	-	%/°C
Dark current	I _D	V _R = 0.9V _{BR}	-	-	100	nA
Excess noise factor	F	$\lambda = 1300\text{nm}$ M = 10 f = 10MHz	-	M ^{0.7}	-	-
Cutoff frequency (-3dB)	f _c	$\lambda = 1300\text{nm}$ M = 10 R _L = 50 Ω	1	3	-	GHz
Capacitance	C _t	V _R = 0.9V _{BR} , f = 1MHz	-	1	-	pF
Optical connector type	-	-	FC			-

Note 1) Fiber: GI type with core dia. 50 μ m and N.A. 0.2

Note 2) M: Multiplication ratio

EXAMPLE OF CHARACTERISTICS

