

# Fiber Optical Tap Monitor Array

(4, 8, 10, 12 channels)

## Product Description

The Integrated Fiber Optical Tap Monitor Array (ITMA) is a multi-channel power monitoring device that integrated an array of individual fiber optical tap monitors in a compact format. ITMA integrates the function of a low percentage optical coupler and a photodiode while delivering low insertion loss and low dark current with high temperature stability over a wide operating wavelength range. ITMA has a standard 12/14-pin package for easily mounted on a PCB.

Photonwares provide customer designs to meet specialized feature applications, and also offer fully function modules or subsystems with readout amplification PCB of USB interface



## Performance Specifications

Parameters	Min	Typical	Max	Unit
Operation Wavelength	1260		1620	nm
Insertion Loss <sup>[1]</sup>	2%		0.4	dB
	5%	0.8	0.6	
	10%	1.0	0.9	
Polarization Dependent Loss			0.05	dB
Return Loss	45			dB
Responsivity <sup>[2]</sup>	2%	10	26	mA/W
	5%	26	65	
	10%	52	120	
Responsivity Temperature Dependence			0.3	dB
Responsivity Polarization Dependence			0.1	dB
Dark Current <sup>[3]</sup>	2.5		10	nA
Reverse Voltage			20	dB
Forward Current			10	mA
Input Optical Power	2%		21	dBm
	5%		16	
	10%		12	
Operating Temperature	-5		70	°C
Storage Temperature	-40		85	°C
Fiber Type			SM-28	

[1] @λ<sub>op</sub>, Top, All SOP, Exclude Connector.

[2] Relative to input power

[3] Measured at -5V bias, 70°C

## Features

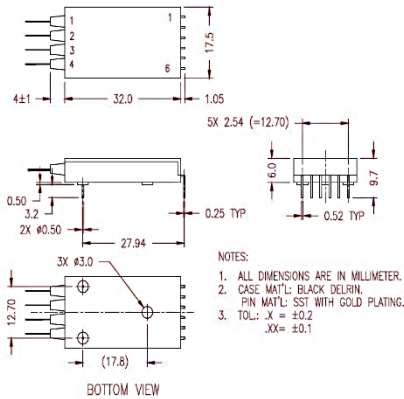
- Low Dark Current
- Ease PCB Mount
- Wide Wavelength
- High Stability

## Applications

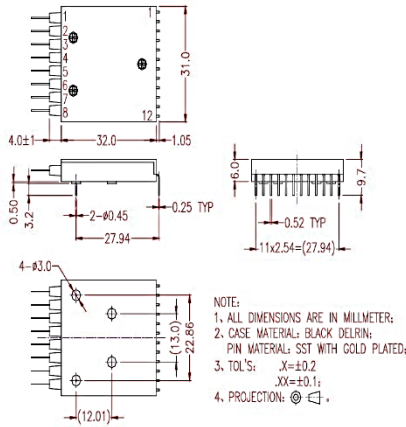
- WDM Channel Monitor
- System Monitor
- Sensor

# Dimensions (Unit: mm)

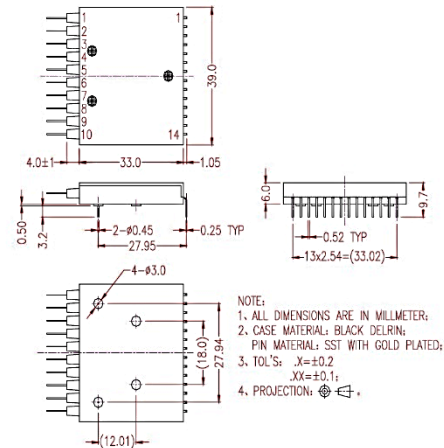
## 1) 4-ch ITMA



## 2) 8-ch ITMA



## 3) 10-ch ITMA



\*Product dimensions may change without notice. This is sometimes required for non-standard specifications.

# Electrical/Computer Connection

Electrical Pin Assignment	Common Cathode Assignment	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2	Common Anode for Ch1 & 2
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Common Cathode for Ch3 & 4	Common Anode for Ch3 & 4
Pin5:	Anode Ch3	Cathode Ch3
Pin6:	Anode Ch4	Cathode Ch4

Electrical Pin Assignment	Common Cathode Assignment	Common Anode Assignment
Pin1:	Common Cathode for Ch1 & 2	Common Anode for Ch1 & 2
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Common Cathode for Ch3 & 4	Common Anode for Ch3 & 4
Pin5:	Anode Ch3	Cathode Ch3
Pin6:	Anode Ch4	Cathode Ch4
Pin7:	Anode Ch5	Cathode Ch5
Pin8:	Common Cathode for Ch5 & 6	Common Anode for Ch5 & 6
Pin9:	Anode Ch6	Cathode Ch6
Pin10:	Anode Ch7	Cathode Ch7
Pin11:	Common Cathode for Ch7 & 8	Common Anode for Ch7 & 8
Pin12:	Anode Ch8	Cathode Ch8

Electrical Pin Assignment	Common Cathode Assignment	Common Anode Assignment
Pin1:	Common Cathode for Ch1 to 4	Common Anode for Ch1 to 4
Pin2:	Anode Ch1	Cathode Ch1
Pin3:	Anode Ch2	Cathode Ch2
Pin4:	Anode Ch3	Cathode Ch3
Pin5:	Anode Ch4	Cathode Ch4
Pin6:	Anode Ch5	Cathode Ch5
Pin7:	Common Cathode for Ch5 to 8	Common Anode for Ch5 to 8
Pin8:	Anode Ch6	Cathode Ch6
Pin9:	Anode Ch7	Cathode Ch7
Pin10:	Anode Ch8	Cathode Ch8
Pin11:	Anode Ch9	Cathode Ch9
Pin12:	Common Cathode for Ch9 & 10	Common Anode for Ch9 & 10
Pin13:	Anode Ch10	Cathode Ch10
Pin14:	Not connected	Not connected

# Ordering Information

Prefix	No. Channel	Tap Ratio	Bandwidth	Package	Fiber Type	Fiber Cover	Fiber Length	Connector
ITMA-	4 = 04 8 = 08 10 = 10 12 = 12	2% = 2 5% = 5 10% = 1 Special=0	0.5G = 5 2G = 2	Common Anode = 1 Common Cathode = 2	SMF-28 = 1 HI1060 = 2 HI780 = 7 HI980 = 9 Special = 0	Bare fiber = 1 900um Loose tube = 3 Special = 0	0.25m = 1 0.5m = 2 1.0 m = 3 Special = 0	None = 1 FC/PC = 2 FC/APC = 3 SC/PC = 4 SC/APC = 5 ST/PC = 6 LC = 7 Special = 0