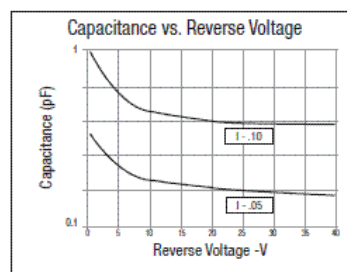
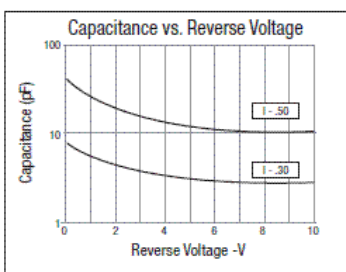
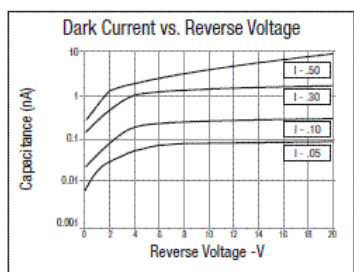
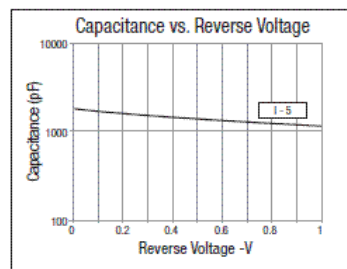
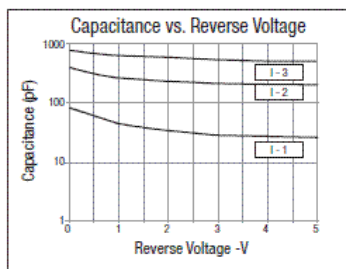
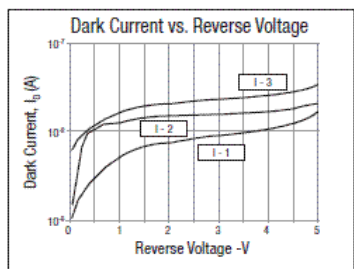
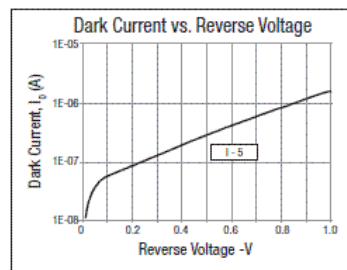
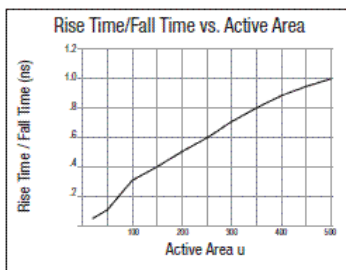
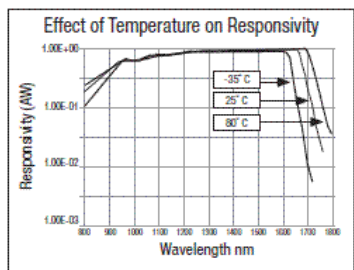




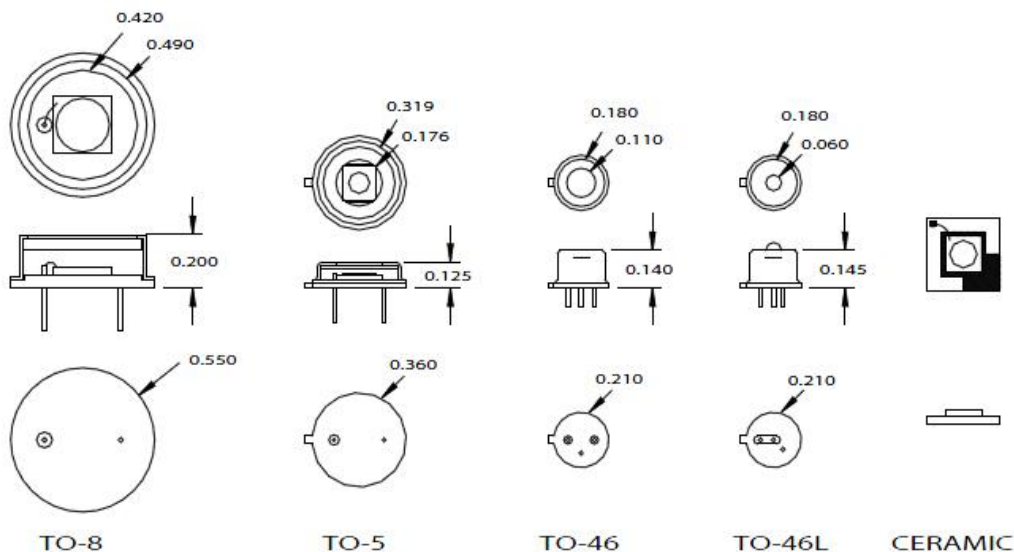
1.室温铟镓砷探测器系列 InGaAs PIN Photodiode

型号与特性参数：

Part Number	I-.05	I-.10	I-.30	I-.50
Active Area Diameter um	50	100	300	500
Responsivity @ 1300nm A/W Min/Typ	0.80/0.90	0.80/0.90	0.80/0.90	0.80/0.90
1550nm A/W Min/Typ	0.90/0.95	0.90/0.95	0.90/0.95	0.90/0.95
Dark Current @ 5V nA Max/Typ	.07/.03	1.0/.05	5.0/1.0	25/5
Capacitance @ 5V pF Max/Typ	0.6/0.4	1.2/1.0	8.0/4.0	40@0V
Bandwidth 50Ω-3dB MHz Min @5V	2.6	2.0	0.7	0.20
Rise/Fall time RL= 50Ω ns Max @ 5V	0.08	0.1	0.25	0.50
NEP @ 1550nm W/√Hz Typ	1.0E-15	1.5E-15	5E-15	8E-15
Storage Temperature °C	-40 to 125	-40 to 125	-40 to 125	-40 to 125
Operating temperature °C	-40 to 85	-40 to 85	-40 to 85	-40 to 85
Reverse Voltage V	25	25	25	20
Reverse Current mA	1	10	10	10
Forward Current mA	10	10	10	10
Package Options * (Note)	CH-CE-46-46L	CH-CE-46-46L	CH-CE-46-46L	CH-CE-46-46L
Part Number	I-1	I-2	I-3	I-5
Active Area Diameter mm	1.0	2.0	3.0	5.0
Responsivity @ 1300nm A/W Min/Typ	0.80/0.90	0.80/0.90	0.80/0.90	0.80/0.90
1550nm A/W Min/Typ	0.90/0.95	0.90/0.95	0.90/0.95	0.90/0.95
Dark Current nA Max/Min	100/25 @5V	200/50 @1V	500/200 @1V	5000 @0.3V
C @ 0V pF Max/Min	120/80	500/300	1000/600	1500/1000
C pF Max/Min	50/30 @-5V	150/100@-3V	300/250@-2V	3000/2000
Bandwidth 50Ω-3dB MHz	40@5V	5.3@0V	4.0@0V	1@0V
T, RL= 50Ω ns Typ	5.0@5V	50@0V	100@0V	300@0V
Res, MΩ Min/Typ	10/50	6/30	2.0/8	0.025/0.050
NEP @1550 nm W/√Hz Typ	.01	.03	.05	.28
Linear Range (±0.2dB) dBm	10	8	8	8
Storage Temperature °C	-40 to 125	-40 to 125	-40 to 125	-40 to 125
Operating Temperature °C	-40 to 85	-40 to 85	-40 to 85	-40 to 85
Reverse Voltage V	20	3	2	2
Reverse Current mA	10	10	10	10
Forward Current mA	10	10	10	10
Power Dissipation mW	100	50	50	50
Package Options * (Note)	CH-CE-46-46L	CH-CE-5	CH-CE-5	CH-CE-8



封装图:

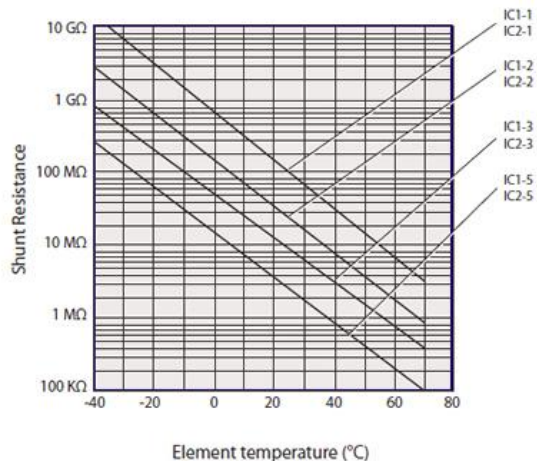


型号和特性参数：

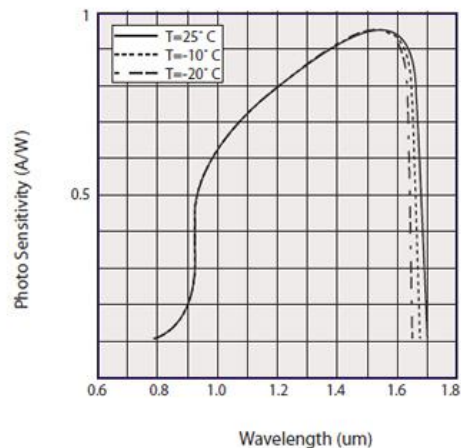
Part Number	IC1-1	IC1-2	IC1-3	IC1-5
Active Area Diameter mm	1	2	3	5
Responsivity @ 1300nm A/W Min/Typ	0.80/0.90	0.80/0.90	0.80/0.90	0.80/0.90
1550nm A/W Min/Typ	0.90/0.95	0.90/0.95	0.90/0.95	0.90/0.95
NEP @ 1550nm W/√Hz Typ	5.0E-15	1.0E-14	2.0E-14	3.0E-14
Dark Current nA @ 1V Typ/Max	0.07/0.35	0.3/1.5	1.0/5.0	2.5/12.5
Capacitance pF @ 1V	150	550	1000	3500
Cut-Off Frequency @ 1V MHz	18	4	2	0.6
Shunt Resistance M ohms	1500	300	100	30
Reverse Voltage Max	5	5	5	2
Storage Temperature °C	-55 to 85	-55 to 85	-55 to 85	-55 to 85
Test temperature °C	-10	-10	-10	-10
Cooler Power Max	1.0V@2.0A	1.0V@2.0A	1.0V@2.0A	2V@1.3A
Package Options * xx	5, 7	5, 7	5, 7	8, 6
Thermistor @ 25°C**	1K	1K	1K	1K
Part Number	IC2-1	IC2-2	IC2-3	IC2-5
Active Area Diameter mm	1	2	3	5
Responsivity @ 1300nm A/W Min/Typ	0.80/0.90	0.80/0.90	0.80/0.90	0.80/0.90
1550nm A/W Min/Typ	0.90/0.95	0.90/0.95	0.90/0.95	0.90/0.95
NEP @1550 nm W/√Hz Typ	3E-15	7E-15	1E-14	2E-14
Dark Current nA @ 1V Typ/Max	0.03/0.15	0.15/0.75	0.5/2.5	1.2/6.0
Capacitance pF @ 1V	150	550	1000	3500
Cut-Off Frequency @ 1V MHz	18	4	2	0.6
Shunt Resistance M ohms	3000	600	200	60
Reverse Voltage Max	5	5	5	5
Storage Temperature °C	-55 to 85	-55 to 85	-55 to 85	-55 to 85
Test Temperature °C	-20	-20	-20	-20
Cooler Power Max	0.8V@1.3A	0.8V@1.3A	0.8V@1.3A	1.9V@1.4A
Package Options * xx	5, 7	5, 7	5, 7	8, 6
Thermistor @ 25°C**	1K	1K	1K	1K

NOTE: * Other Packages are available ** Other Thermistors are available xx Band Pass Filters are available

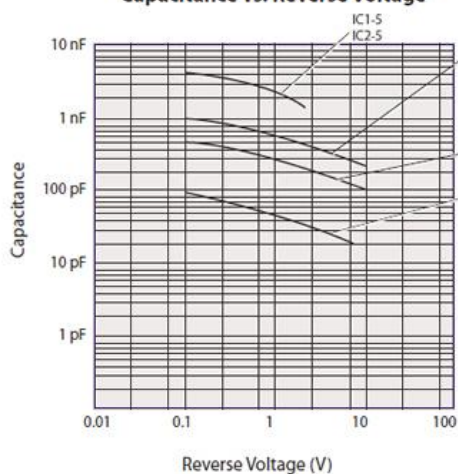
Shunt Resistance vs. Temperature



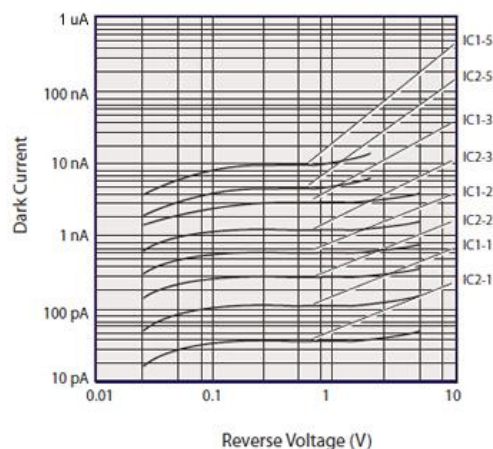
Spectral Response



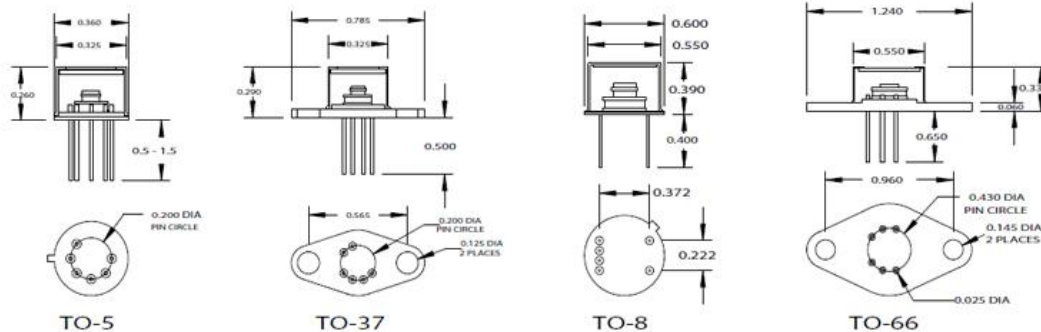
Capacitance vs. Reverse Voltage



Dark Current vs. Reverse Voltage



封装图:



型号和特性参数：

Room Temperature

Part Number	IE6-.5	IE6-1	E6-2
Active Area Diameter um	500	1000	2000
Responsivity @ 2300nm A/W Min/Typ	0.9/1.3	0.9/1.3	0.9/1.3
Dark Current @ .5V uA Typ/Max	5/50	15/75	75/100
Capacitance @ 0V pF	60	200	800
Shunt Resistance @ 10mV Kohms	15	3	1
D*(cm.Hz ^{1/2} /W)	5x10 ¹⁰	5x10 ¹⁰	5x10 ¹⁰
NEP (W/Hz ^{1/2})	1x10 ⁻¹²	2x10 ⁻¹²	5x10 ⁻¹²
Spectral Range Microns	1.2-2.6	1.2-2.6	1.2-2.6
Cut-Off Frequency @0V -3dB(MHz)	50	15	5
Test Temperature °C	25	25	25
Storage Temperature °C	-40 to 125	-40 to 125	-40 to 125
Package Options *(Note)	4-5	4-5	4-5

Thermoelectrically Cooled 1 Stage

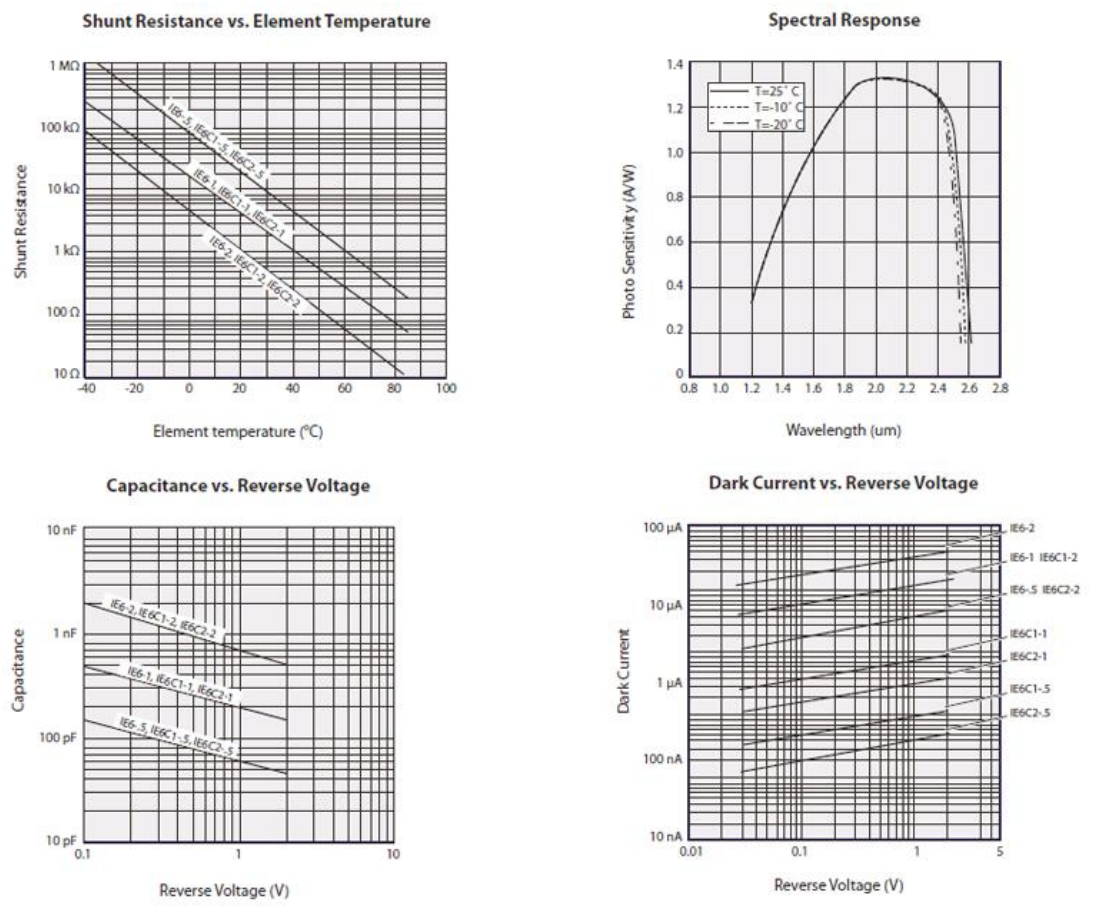
Part Number	IE6C1-.5	IE6C1-1	IE6C1-2
Active Area Diameter um	500	1000	2000
Responsivity @ 2300nm A/W Min/Typ	0.9/1.3	0.9/1.3	0.9/1.3
Dark Current @ 0.5V nA Max/Typ	.5/4	1.5/7.5	7.5/40
Capacitance @ 0V pF	60	200	800
Shunt Resistance @ 10mV Kohms	15	3	1
D*(cm.Hz ^{1/2} /W)	1x10 ¹¹	1x10 ¹¹	1x10 ¹¹
NEP (W/Hz ^{1/2})	4x10 ⁻¹³	7x10 ⁻¹³	1x10 ⁻¹²
Spectral Range Microns	1.2-2.57	1.2-2.57	1.2-2.57
Cut-Off Frequency @0V -3dB(MHz)	50	15	5
Test Temperature °C	-10	-10	-10
Storage Temperature °C	-40 to 125	-40 to 125	-40 to 125
Package Options *(Note)	5-7-6-8	5-7-6-8	5-7-6-8

Thermoelectrically Cooled 2 Stage

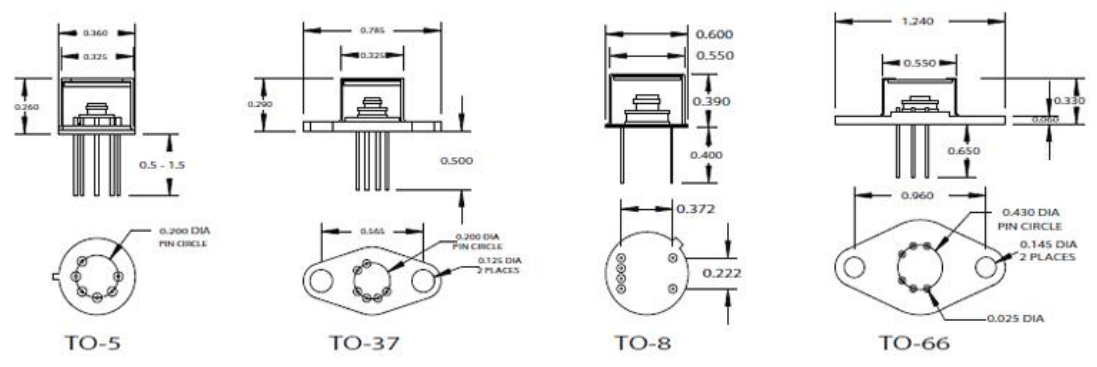
Part Number	IE6C2-.5	IE6C2-1	IE6C2-2
Active Area Diameter um	500	1000	2000
Responsivity @ 2300nm A/W Min/Typ	0.9/1.3	0.9/1.3	0.9/1.3
Dark Current @ 0.5V nA Max/Typ	.2/5	.8/4	4/50
Capacitance @ 0V pF	60	200	800
Shunt Resistance @ 10mV Kohms	400	60	20
D*(cm.Hz ^{1/2} /W)	2x10 ¹¹	2x10 ¹¹	2x10 ¹¹
NEP (W/Hz ^{1/2})	3x10 ⁻¹³	5x10 ⁻¹³	9x10 ⁻¹³
Spectral Range Microns	1.2-2.55	1.2-2.55	1.2-2.55
Cut-Off Frequency @0V -3dB(MHz)	50	15	5
Test Temperature °C	-20	-20	-20
Storage Temperature °C	-40 to 125	-40 to 125	-40 to 125

NOTE: * 4 = TO46 Package, 5 = TO5 Package, 7 = TO37 Package 8 = TO8 Package
 Custom filters, windows and packages are available

特性曲线：



封装图：



4. 铟镓砷探测器模块 InGaAs Detector Controller-AP300-T2 TE-Cooled Infrared Sensor

Features

- 1.2 to 2.6um Sensitivity
- Extended InGaAs Sensor
- 0.5, 1.0 and 2.0mm dia. Active Areas
- Compact Size - 1.5" Dia x 2.5"
- 2-Stage Thermo-Electric Cooling
- Flexible Mounting Options

Applications

- IR Sensing
- Gas Detection
- R&D

Description

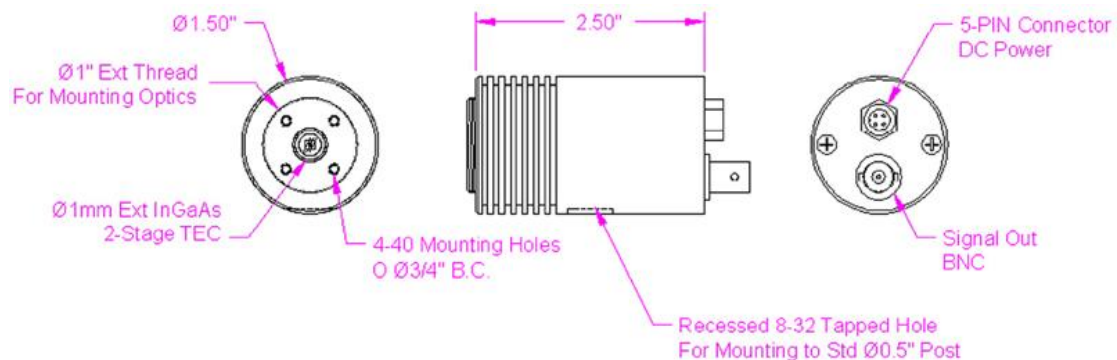
The AP300-1-T2 is an amplified InGaAs sensor with a 2-stage thermo-electric cooler (TEC). A low noise amplifier provides detector-noise limited performance in a compact package. The 2-stage TEC ensures low noise operation up to 2.6um and a large 1mm² active area provides generous light collection. All that is needed is a DC power supply.

OEM custom configurations welcome. Please contact us to discuss your requirements.

Specifications

Part Number:	AP300T2-.5	AP300T2-1	AP300T2-2
Active Area Dia (mm):	0.5	1.0	2.0
Detector:	Extended InGaAs		
Detector Operating Temp (°C):	-20 °C		
Peak Wavelength:	2.3um		
Responsivity:	2.0 x 10 ⁸ V/W		
NEP (W/√Hz):	3 x 10 ⁻¹³	5 x 10 ⁻¹³	9 x 10 ⁻¹³
Frequency Response:	DC - 5KHz		
Output Voltage:	10V		
DC Power Supply:	+/- 12V @ 50mA		
TEC Power Supply:	3.3V @ 1.1A		

Dimensions



Spectral Response

