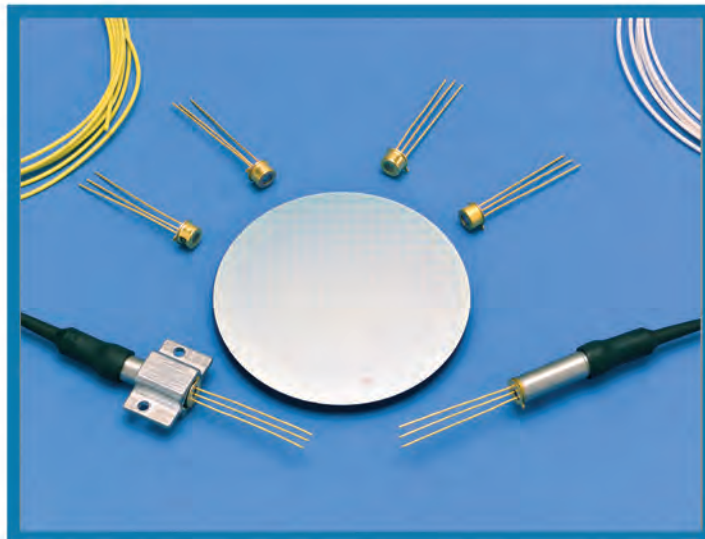


Ge Avalanche Photodiode



- OTDR
- Infrared Sensing
- Telecommunications
- Optical Communications
- Short Haul Telecom/Datacom Receivers

GPD Optoelectronics Corp.

7 Manor Parkway
Salem, NH 03079 U.S.A.
Tel/Fax: (603)894-6865/6866
<http://www.gpd-ir.com>

**Electrical Characteristics @ 25 °C**

	GAV40	Units
Quantum Efficiency (peak)	72 (80)	% min. (typ.)
Responsivity @1300 nm	0.76 (0.84)	A/W min. (typ.) M=1
Breakdown Voltage *	20 / 30 / 40	V min./typ./max.
Dark Current @0.9V _b	0.2 (0.10)	μA max. (typ.)
Capacitance @ 20V **	1.0 (0.8)	pF max. (typ.)
Multiplied Dark Current	12	typ. M=1
Cutoff Frequency (-3dB)	1.5 (2.0)	GHz min. (typ.)
Excess Noise Figure	0.95 BW=1MHz M=10 I _{ph} =2μA typ.	
Excess Noise Factor	9 @1300 nm, f=300MHz typ.	
Temperature Coefficient of V _b	0.1 % / °C	

*I_R=100μA ** f=1MHz

Physical Specifications

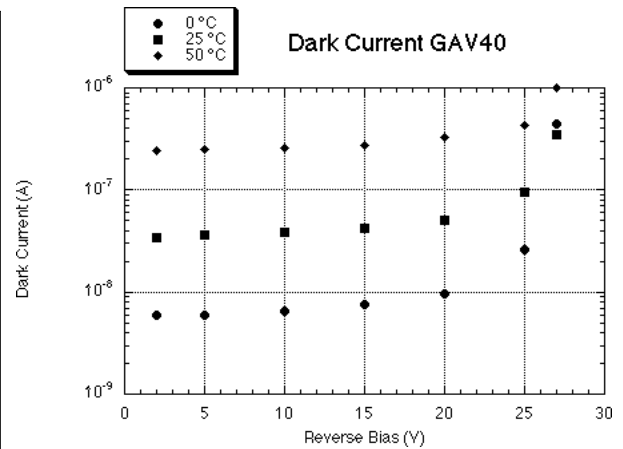
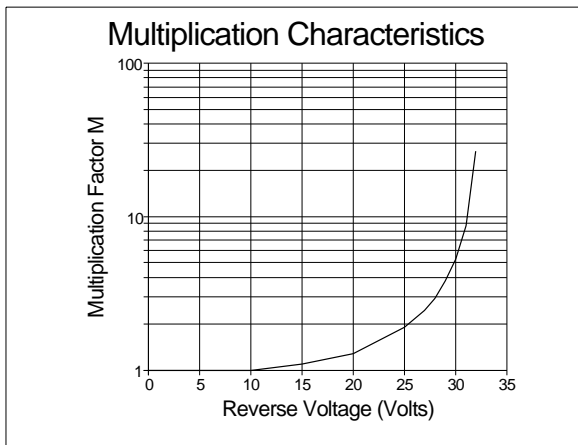
	GAV40
Active Diameter (μm)	40
Case Styles	TO-46 (modified)/TO-46 SM and MM pigtail, active mounts and ceramic substrates

Maximum Ratings

	GAV40	Units
Storage Temperature	-40 to 85	°C
Operating Temperature	-10 to 60	°C
Reverse Current	0.4	mA
Forward Current	80	mA

GPD Optoelectronics Corp.

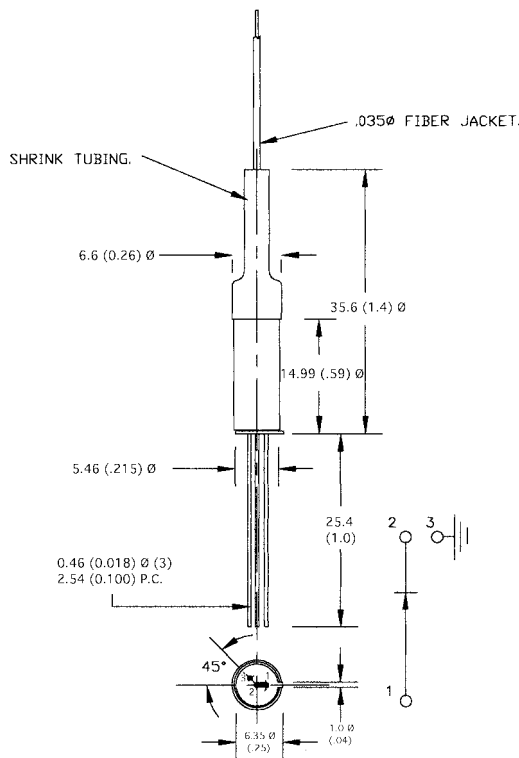
7 Manor Parkway
Salem, NH 03079 U.S.A.
Tel/Fax: (603)894-6865/6866
<http://www.gpd-ir.com>



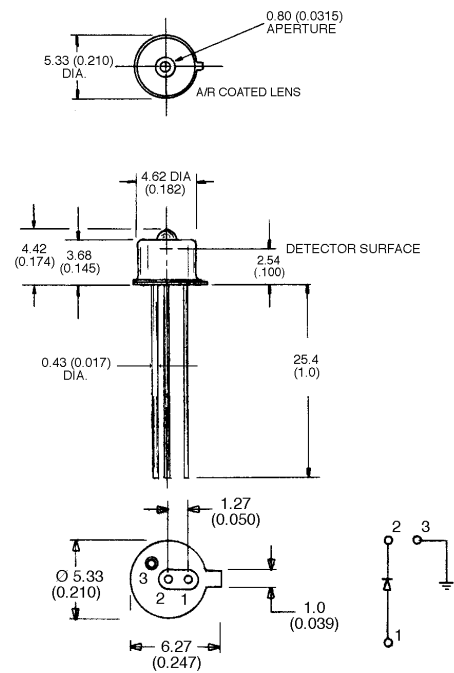
Package Outlines

Dimensions in mm. (in.). Many other packages are available.

TO-46 SM Pigtail

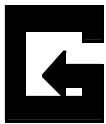


TO-46 (modified)



GPD Optoelectronics Corp.

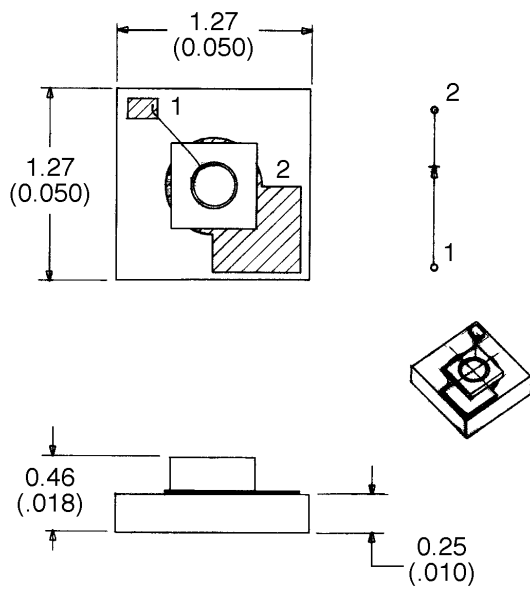
7 Manor Parkway
Salem, NH 03079 U.S.A.
Tel/Fax: (603)894-6865/6866
<http://www.gpd-ir.com>



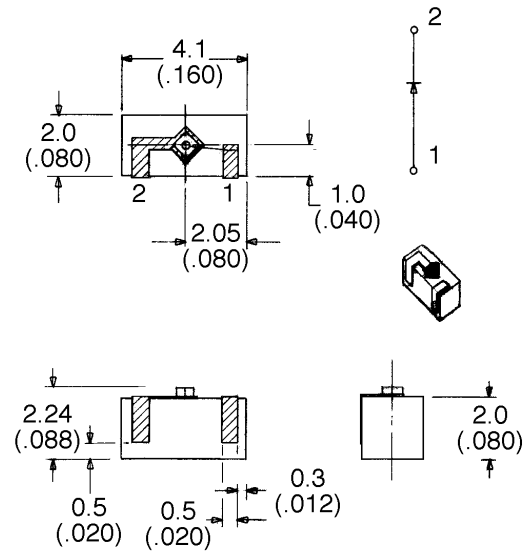
Ceramic Submount Outlines

Dimensions in mm (in.)

CS-1



CS-2



GPD Optoelectronics Corp.

7 Manor Parkway

Salem, NH 03079 U.S.A.

Tel/Fax: (603)894-6865/6866

<http://www.gpd-ir.com>