

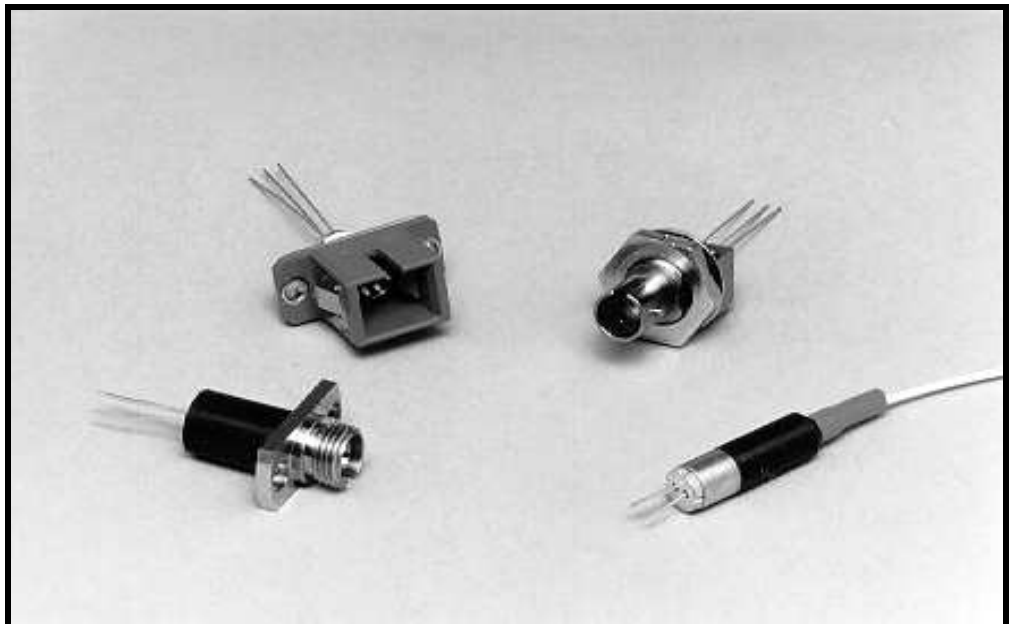


PE13W Series 1300nm ELEDs for Fiber Optics



PD-LD Inc. offers 1300nm Edge Emitting LEDs, ELEDs, in ready-to-use fiber coupled packages, including FC, ST and SC receptacles as well as fiber-pigtailed units. These 1300nm ELED devices have been packaged for optimal coupling into 9/125um optical fiber for use in single mode fiber optic applications. The semiconductors inherently fast rise and fall time make them ideal for high bandwidth applications. The wide optical spectrum, 60nm FWHM, of the semiconductor make them ideal for many noise sensitive applications. The InGaAsP ELED's offered by PD-LD are of proven design and manufacture. These units are backward compatible with those applications previously using devices offered by Agilent (HP) , OKI and JDSUniphase. They typically couple 8 to 10uW into SMF.

All PD-LD ELED's incorporate a hermetically sealed semiconductor mounted in a TO can sub-assembly. These subassemblies are micro-positioned to various lens assemblies depending upon the package style and desired coupling efficiency. Fiber pigtailed devices are available with several choices of brackets to facilitate panel or pc board mounting.

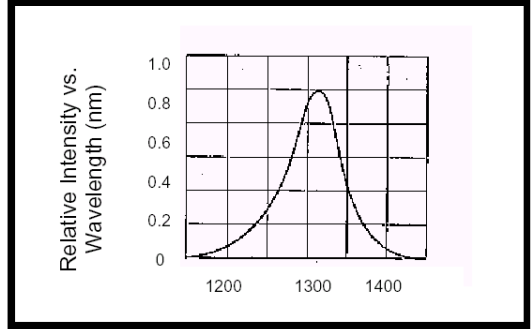


Features

- High reliability InGaAsP Diode
- Compact, robust receptacle & coax fiber-coupled package
- 5 to 20 uW into SMF

Applications

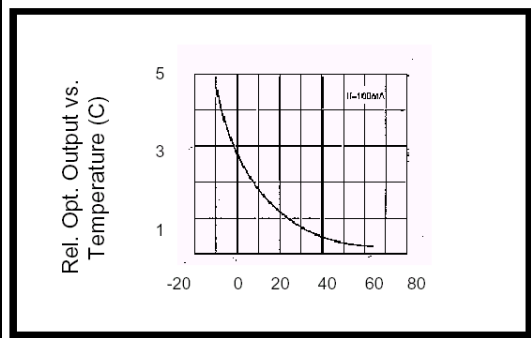
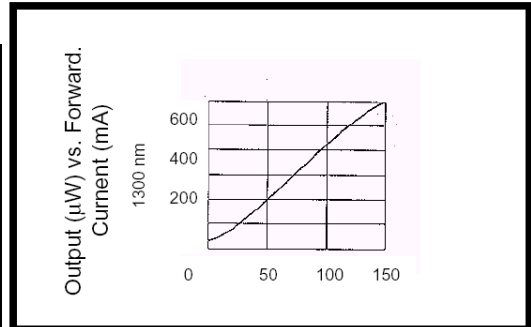
- Fiberoptic communications systems
- Analog Transmission
- Ethernet Networking



Typical ELED Characteristics

Performance Specifications

InGaAsP 1300nm ELEDs@25 C, 100mA Center Wavelength 1300+/- 30nm , Spectral Width 40nm typ. 100nm max.				
PD-LD Part No.	Fiber Coupled Power (uw)		Package Style	Mounting Features
	Min.	Typ. Max.		
PE13W0051FCA-0-0-01	5	8	- Pigtailed FC/PC Connector	Co-Axial Bracket available
PE13W010ST71-Q-0	10	15	- Receptacle ST Style	PC Board Mountable
PE13W015FC11-Q-0	15	20	- Receptacle FC Style	Panel Mounting
PE13W010FC21-Q-0	10	15	- Receptacle FC Style	Board Mountable
PE13W100ST83-D-0 Optimized for 62.5um MMF	100	125	- Receptacle ST High Profile	Board Mountable

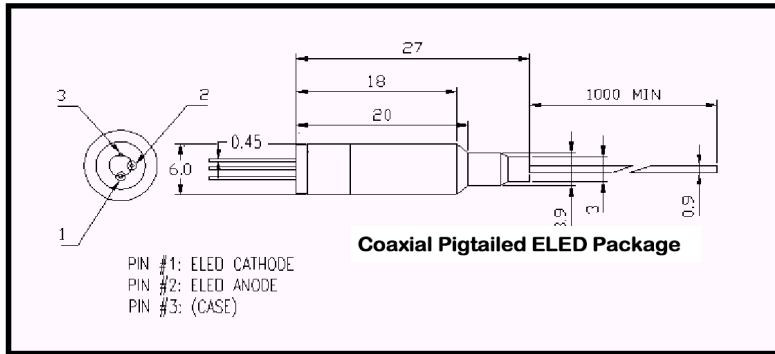




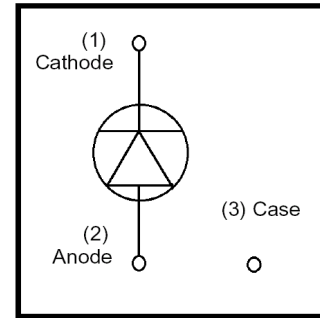
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Physical Dimensions (mm)

A press-fit panel mount is available; see ordering information.



Pin Assignment



Optical and Electrical Characteristics 100mA operating current at 1.3V

Parameter	Symbol	Minimum	Typical	Maximum	Units	Note
Fiber coupled Power	P_o	100	125		μW	62.5/125 μm
Rise and Fall Time (10-90%)	t_R, t_F		2.5	4.0	ns	
Bandwidth (3dB)	f_c		150		MHz	
Peak Center Wavelength		1290	1310	1330	nm	
Spectral Width (FWHM)	$\Delta \lambda$		40	60	nm	
Forward Voltage	V_F		1.2	1.7	V	
Leakage Current				80	μA	
Capacitance	1MHz, $V_F=0$			250	pF	
Wavelength Temperature Coefficient			0.4		nm/ $^{\circ}C$	

Absolute Maximums

Parameter	Value	Unit
Storage Temperature	-55 to 125	$^{\circ}C$
Operating Temperature	-40 to 85	$^{\circ}C$
Continuous Forward Current	100	mA
Peak Forward Current	150	mA
Reverse Voltage	2.0	V
Soldering Temperature (2mm from case for 10 sec)	240	$^{\circ}C$

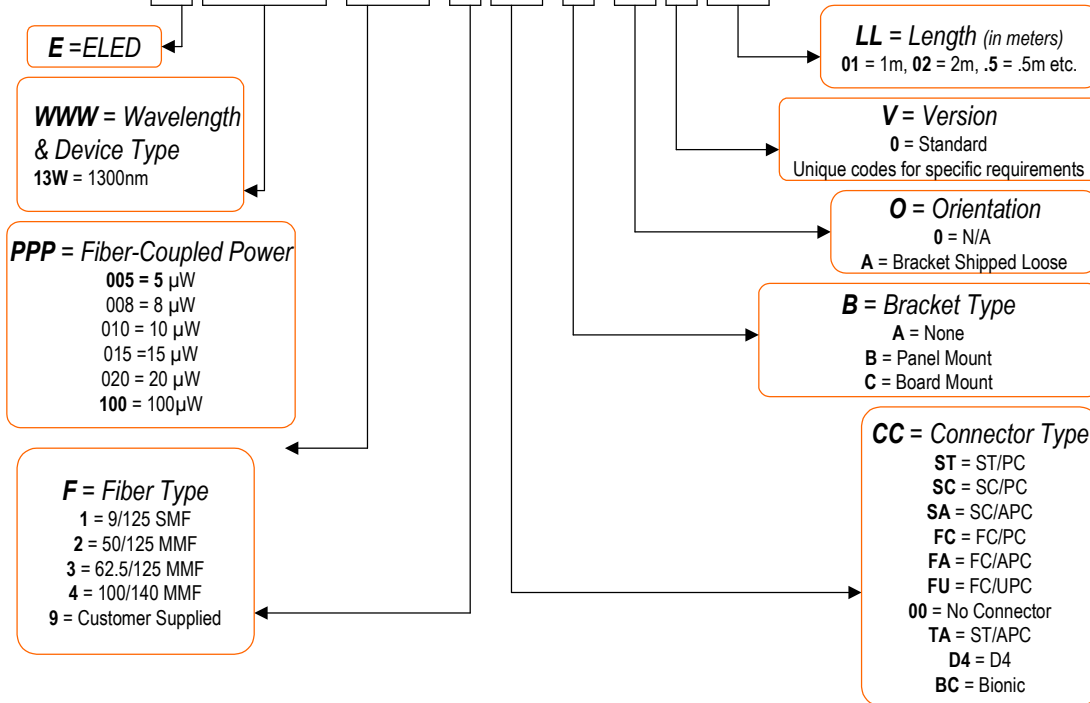


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Ordering Information

Data Legend: Pigtailed SLEDs

PE WWW PPP FCCB-O-V-LL



Data Legend: Receptacle ELEDs

Ex: PE WWW PPP RRR F-O-V

