

## OPTICAL FIBER LIGHT EMITTING DIODES & PHOTODETECTORS with SMA TYPE CONNECTORS

(DS1602)



### APPLICATIONS:

An SMA terminated optical fiber light emitting diode (FO-LED), an SMA terminated photo-transistor (FO-PT) and an SMA connectorised PMMA patch cord make up the basic component set for transmission of electrical signals through the optical medium. With just a few additional external components, a variety of analog and digital transmission circuits can be realized.

### SPECIFICATIONS of LIGHT EMITTING DIODES

LED Wavelength in nm (nominal)	660	850	950
Spectral Width in nm (typical)	45	60	50
Forward Current in mA (max)	25	25	25
Forward Voltage in volts (typical)	1.9	1.7	1.5
Reverse Breakdown Voltage in volts (typical)	5.0	5.0	5.0
Coupled Optical Power in dbm at $I_f=10$ ma (typical)	-12	-15	-13
Leads Colour Code Anode/Cathode	Red/Black	Gr/Black	Yel/Black
Case Dimensions 11mm dia/20mm length: Leads Teflon Insulated Tinned Copper			
<b>Ordering Code: Light Emitting Diode SMA /660 or /850 or /950</b>			

### SPECIFICATIONS of PHOTO-TRANSISTOR / PHOTODIODE

Photodetector Type	PT	PIN PD
Spectral Bandwidth in nm (nominal) in nm	400 to 1100	400 to 1100
Peak Responsivity Wavelength in nm	860	850
Dark Current in nA (typical)	100	2
Rise and Fall Times in ns (typical)	1000	20
Sensitivity @ 660nm/ -10dbm/ $R_{in}=100$ ohms in mV (typ)	1500	4
Leads Colour Code C/E for PT and An/Ca PIN PD	Red/Blue	Red /Green
Case Dimensions 11mm dia/20mm length: Leads Teflon Insulated Tinned Copper		
<b>Ordering Code: Phototransistor SMA/WB ; Photo PIn Diode SMA/WB</b>		

### BASIC COMPONENT SET



FO LED 660 nm

+



1-Meter Cable

+



FO P' Transistor