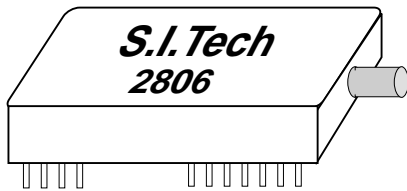
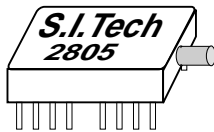


Model 2805 TR/2806 REC



Fiber Optic Transmitter/Receiver Pair

DUAL IN-LINE PACKAGE FOR PC BOARD MOUNT



TRANSMISSION LINE INTERFACE

Operating distance is dependent upon optical fiber core diameter and the cable's optical attenuation. The table below indicates three cables that may be used at any data rate. These cables are available in connectorized assemblies to meet the exact configuration of your application.

S.I.Tech offers complete links including fiber optic cable, connectors, cable assemblies, and Bit-Drivers®.

OPERATING DISTANCE FOR FIBER OPTIC CABLE

Fiber Size (Microns)	Attenuation dB/Km	Distance Meters	Distance Feet
62.5	4.0	2000	6600
50	3.0	2000	6600

SYSTEM

Transmission: Up to 6500 ft. (2 Km) with suitable graded index fiber optic cable

Typical Bit Error Rate: Better than 10^{-9}

ELECTRICAL SIGNAL INPUT/OUTPUT FOR TRANSMITTER AND RECEIVER

Format: TTL

Connector: Solder pads or DIP socket

Duty Cycle: 0 to 100%

Minimum Pulse Width: 50 nanoseconds

Data Rate: DC to 20 Mbps NRZ

Input impedance: TTL, optional 75 ohm TTL levels

Output Impedance: Standard TTL logic output (sink 16 milliamps, source 400 microamps)

OPTICAL TRANSMITTER

Output Power at 100 mA

LED Current: 10 microwatts (-20 dBm) into 50 micron fiber. Output power is pin selectable over a 10 dB range

Wavelength: 820 nanometers

Emitter Type: LED

Optical Connector: SMA compatible metal receptacle

OPTICAL RECEIVER

Wavelength: 670 to 950 nanometers, 820 to 900 nanometers is optimum

Minimum Sensitivity: (BER $\leq 10^{-9}$) 1 microwatt (-30 dBm) @ 820 nanometers

Maximum Sensitivity: 10 microwatts

Minimum Optical Risetime

required: 0.25 microseconds

Optical Connector: SMA compatible metal receptacle

Operating Temperature: 0 °C to 50 °C

Size: TR2805 (24 pin DIP)

1.2" X 0.75" X 0.37" (3X1.9X0.94 cm)

REC 2806 (40 pin DIP)

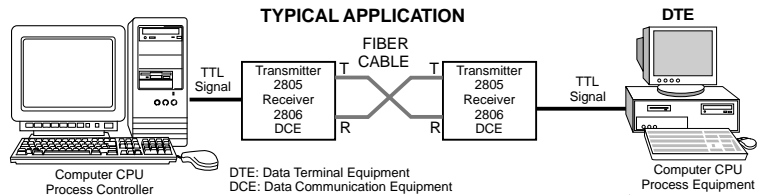
2.0" X 1.12" X 0.37" (5X2.8X0.94 cm)

Hybrid circuit in an all metal DIP

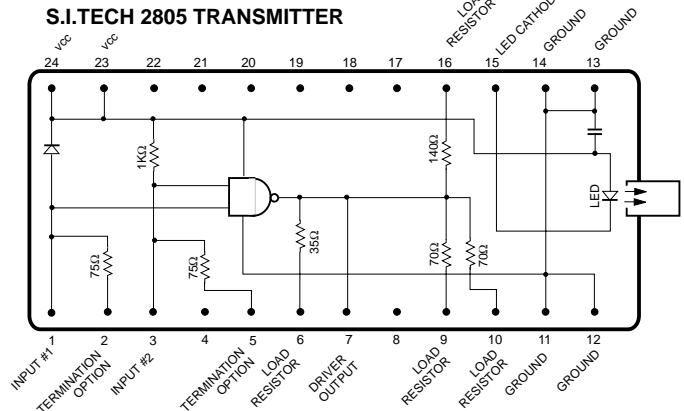
Weight: TR/REC pair - 0.25 lb (100 grams)

Stand Alone Version: Model 2856 with power supply and Bit-Driver® enclosure
2817-T/R Mini Version

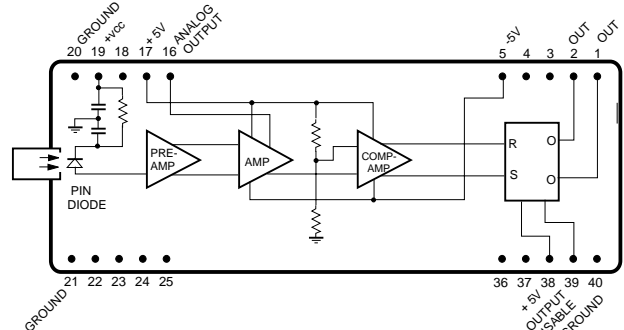
P.C.Board Version: S.I.Tech 2865



S.I. TECH 2805 TRANSMITTER



S.I. TECH 2806 RECEIVER



Meets FCC requirements of Class A, Part 15 Computing Devices Standard.
Specifications subject to change without notice.