

GP2W0112YP

IrDA Transceiver Module

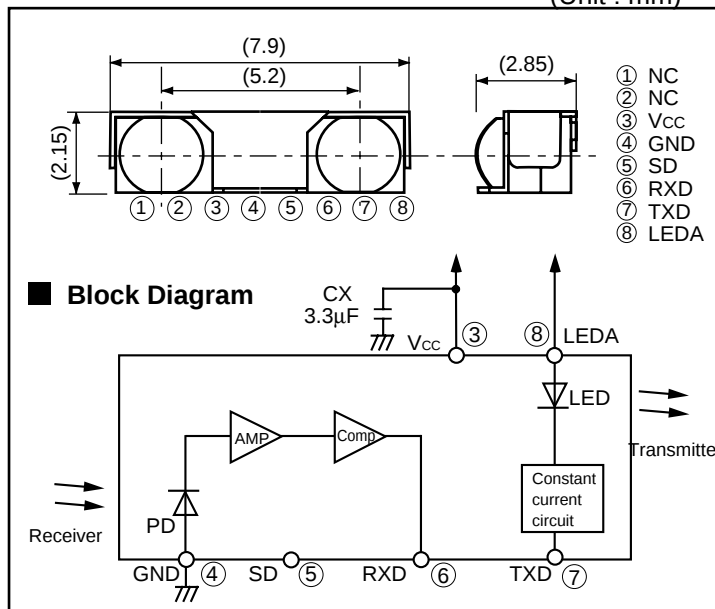
IrDA Transceiver Module (for IrDA 1.2 Low Power Use Only)

Feature

- (1) Exclusive for use in IrDA 1.2 Low Power standard
- (2) Low voltage operation type
(Operating voltage: 1.7 to 2.5 V)
- (3) Compact package with integrated transmitter and receiver
(7.9 x 2.85 x 2.15h mm)
- (4) 3-state output type
- (5) Separate power supplies for optical receiver(V_{CC}) and transmitter(V_{LEDA})
- (6) Low dissipation current
(Dissipation current: TYP. 90μA)
- (7) Dissipation current is low due to a shutdown function
(Dissipation current at shut-down: TYP:0.001μA)
- (8) Built-in constant-current LED circuit
(TYP. 32mA)

Outline Dimensions

(Unit : mm)



Block Diagram

IrDA 1.2 Low Power:

With this standard, the delay time has been reduced from 10ms to 0.5ms in order to decrease the transmission distance for IrDA 1.0 from 1m to 20cm and to transmit audio signals.

IrDA: Stands for Infrared Data Association. Industrial group name for standardizing infrared communication specifications.

Applications

- (1) Cellular phone, PHS
- (2) Personal information tools

Specifications

Parameter	Symbol	Specifications			Unit	Conditions
		MIN.	TYP.	MAX.		
Maximum communication distance	L	0.2	-	-	m	*1
Operating supply voltage	V _{CC}	1.7	-	2.5	V	-
	V _{LEDA}	2.0	-	6.0	V	-
Dissipation current	I _{CC}	-	90	120	μA	V _{CC} =1.8V
Dissipation current at shut-down	I _{CC-S}	-	0.001	0.1	μA	V _{CC} =1.8V
High level output voltage	V _{OH1}	V _{CC} -0.4	-	-	V	-
Low level output voltage	V _{OL1}	-	-	0.4	V	-
Delay time	-	-	-	0.5	ms	-
Radiant intensity	I _E	3.6	-	-	mW/sr	V _{CC} =1.8V
LED peak current	I _{LED}	-	32	-	mA	-
Peak wavelength	λ _P	850	870	900	nm	-
Operating temperature	T _{opr}	-20	-	85	°C	-

*1 : Using standard transceiver (Light-emission intensity: 3.6mW/sr, Light-detection sensitivity 9μW/cm²)

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