220Mbps 850nm Multimode Optical Receiver

Features

- 2X8 pins metal case with ST Receptacle
- Wavelength 850nm for 100/140μm multimode fiber application
- Wide operating temperature range –40℃~85℃
- Single 5V power supply
- Receiver signal detect function

Specifications

Parameter	Symbol	Min.	Typ.	Max.	Unit
Data Rate (NRZ)	B	10	-	220	Mb/s
Optical Input Sensitivity (avg.) (1) (2)		-	-	-31	dBm
Saturation (avg. power)		-3	-	-	dBm
Optical Wavelength	λ	650	850	900	nm
Output Rise Time (10-90%)	t_r	-	1.5	2.5	ns
Output Fall Time (10-90%)	t_f	-	1.5	2.5	ns
Data Output	V_{OL} V_{OH}	V_{cc}-1.83 V_{cc} -1.035	- -	V_{cc} -1.62 V_{cc} -0.88	V V
SD Deasserted Power Level (avg.)	P_A	-	-	-31	dBm
SD Asserted Power Level (avg.)	P_D	-43	-	-	dBm
SD Hysteresis	-	1.5	-	-	dB
SD Timing (Increasing light input)	T_{SD+}	-	-	100	μs
SD Timing (Decreasing light input)	T_{SD-}	-	-	350	μs
Supply Voltage	Vcc	4.75	5	5.25	V
Supply Current	Icc	-	80	100	mA
Power Dissipation		-	400	550	mW

Notes：

(1) With 0.29 NA, 100/140μm multimode fiber.
(2) Data rate 200Mb/s, 2^{23} -1 PRBS, BER= $2.5x10^{-10}$.

Absolute Maximum Ratings

Parameter	Min.	Max.	Unit
Operating Temperature	-40	85	°C
Storage Temperature	-40	100	°C
Lead Soldering Limits	-	240/10	°C /sec
Supply Voltage	-0.2	6	V

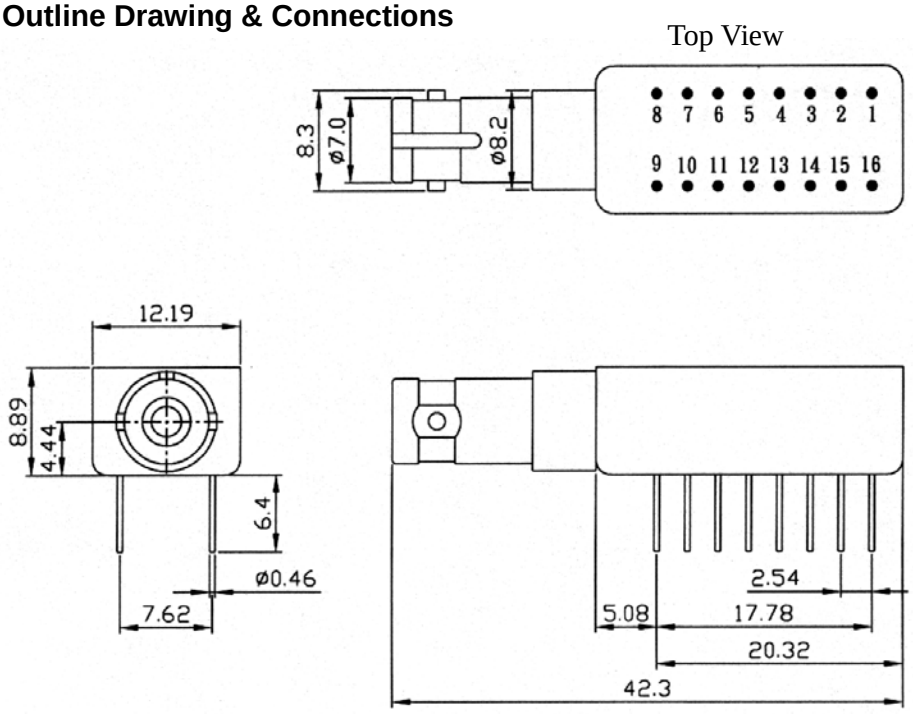
Ordering Information

SNS R085MM0-XTST5GR1G2B

220Mbps Multimode Optical Receiver

Type-B Pin-Out

Outline Drawing & Connections



CONNECTIONS

Pin	Function	Pin	Function
1	CASE	9	CASE
2	DATA-	10	N/C
3	DATA+	11	CASE
4	V_{CC2}	12	V_{EE1}
5	V_{CC1}	13	V_{EE2}
6	N/C	14	SIGNAL DETECT+
7	CASE	15	SIGNAL DETECT-
8	CASE	16	CASE