

870MHz.GaAs Optical Receiver Module

CGE887BO



FEATURES

- GaAs ACTIVE DEVICES
- POWER GAIN 20 dB
- STANDARD CATV OUTLINE
- EXCELLENT LINEAR GAIN
- LOW NOISE FIGURE
- LOW COST
- HIGH RELIABILITY
- FC/APC CONNECTOR(JDS VERSION)

OUTLINE



Pin: 1 2 3 5 7 8 9 →

DESCRIPTION

Hybrid high dynamic range optical receiver module operate over frequency range of 40 to 870MHz with +24V(DC) supply voltage. The module contains a monomode optical input suitable for wavelengths from 1290 to 1600 nm, a terminal to monitor the pin diode current and an electrical output with an impedance of 75Ω. The optical fibre is terminated by an FC/APC connector(JDS version) and partly reinforced by a 3 mm diameter Kevlar buffer.

Pin	Description
1	Monitor current
5	+V _B
9	Output
2,3,7,8	Common

ELECTRICAL CHARACTERISTICS (Bandwidth 40 to 870 MHz; T_{CASE} = 25°C, V_{DD} = 24V, Z_S = Z_L = 75 Ω)

PART NUMBER			CGE887BO			CONDITIONS
SYMBOLS	PARAMETERS	UNITS	MIN	TYP	MAX	
BW	Frequency Range	MHZ	40	-	870	
Pin	Optical input power	mW	-	-	5	
GA	Gain	dB	20.	21.0	22.2	Pin = 0dBmV
GF	Gain Flatness	dB	-	-	±0.5	f = 40 to 870 MHz
S22	Output Return Loss	dB	10	-	-	f = 40 to 870MHz
CTB	Composite Triple Beat	dB	-	-78	-	Two laser test; Pin = 0dBmV
CSO	Composite Second Order	dB	-	-68	-	Two laser test; Pin = 0dBmV
d ₂	Second order distortion	dB	-	-70	-	Two laser test; Pin = 0dBmV
I _{tot}	Total Current Consumption	mA	-	235	-	DC value; V _B = +24V
NF	Noise Figure	dB	-	-	5.0	f = 870 MHz
λ	Optical wavelength	nm	1290	-	1600	
S	Responsivity	V/W	800	-	-	λ = 1300 nm
T _{OP}	Operating Temperature	°C	-40	-	+85	
T _{STG}	Storage Temperature	°C	-40	-	+85	