



2610C Broadband Photodiode Module

- Flat Response, ± 0.5 dB
- Frequency Response up to 600 MHz
- High Responsivity > 0.85 A/W
- Internal Current Gain > 7 dB
- Compatible with 75Ω CATV amplifier

The Ortel Model 2610C is a packaged photodiode with internal current gain designed for use in AM-VSB CATV receivers. The internal current gain circuit results in a better gain-bandwidth product compared to an external circuit due to better control of parasitics between the photodiode and the transformer. Also, the diode distortion is tested under actual load conditions with the full RF output signal present, so the actual CTB and CSO distortion are known in advance before the diode is installed in the receiver.

PRODUCT SPECIFICATIONS

RF Parameters

Frequency Range	40 to 600 MHz
Gain ¹	> 7 dB
Gain Ripple	$< \pm 0.5$ dB
Receiver Noise	See graph
Distortion Products ²	
Third Order	< -80 dBc
Second Order	< -70 dBc

Optical Parameters

Wavelength	1310 ± 30 nm
Responsivity	> 0.85 mA/mW
Optical Return Loss ³	> 45 dB
Fiber	Singlemode (9/125)
Optical Connector	None

DC Parameters

Bias Voltage	15 V (nominal)
Dark Current	< 200 nA @ $+20^\circ$ C

¹ Current gain of internal transformer circuit.

² Two laser test. Each laser has 40% modulation index. Total received power is 0 dBm. Distortion products measured at 80 MHz and 450 MHz.

³ Without connector.

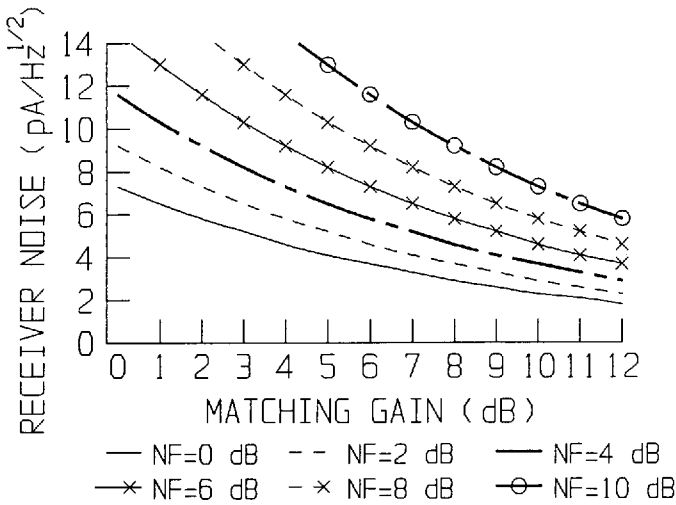
NOTE: The product specifications above describe warranted performance. Typical values, indicated by (typ.), provide expected levels of performance, but are not guaranteed.

Maximum Ratings

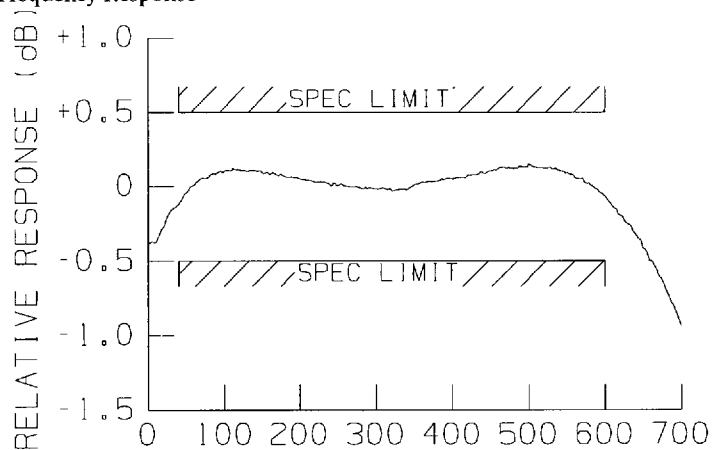
Operating Case Temperature	-40 to +85° C
Storage Temperature	-55 to +85° C
Optical Input Power	2 mW continuous
Bias Voltage	20 V
Forward Current	10 mA

Typical Performance Curves

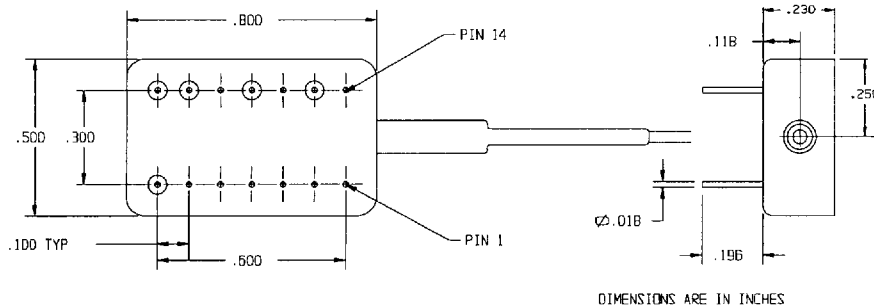
Receiver Noise



Frequency Response



Outline Drawing



PIN	FUNCTIONS
1	Ground
2	Ground
3	Ground
4	Ground
5	Ground
6	Ground
7	Open
8	Open
9	RF Out
10	Ground
11	Bias
12	Ground
13	Open
14	Ground

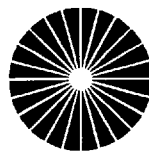
Ordering Information

Contact your local sales representative for current prices.

Model Numbers

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