

DSC-R401ER

Low-Noise 12.3 Gbits/s Optical Receiver for RZ data

Description:

The 20 GHz bandwidth of the R401ER preserves the Return to Zero (RZ) pulse shape while providing up to 2 V_{p-p} output for OC-192/SDH-64 data. To meet the transmission distances required in the long-haul networks, designers of 10 Gbits/s transport systems need extra bandwidth for Forward Error Correction (FEC) and RZ digital formats. The low-noise amplifier provides gain to drive circuit board with low electrical return loss, improving link performance, consistency and reliability while saving board space.

Features:

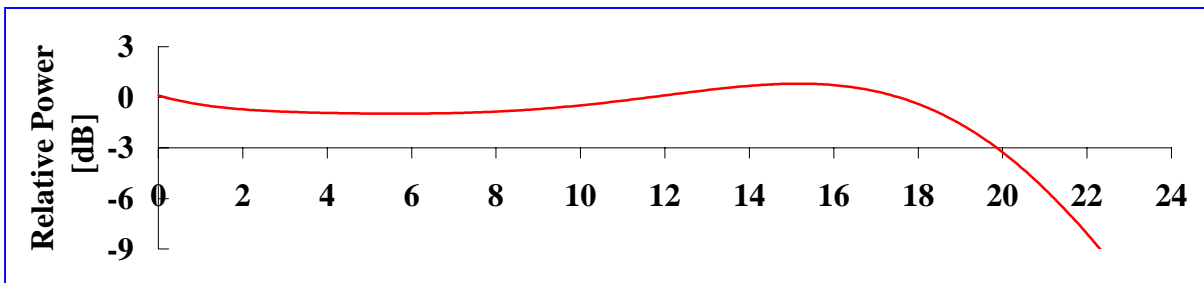
- Wide bandwidth for 10.8 and 12.3 Gbits/s data in RZ format
- Low electrical return loss
- Low group delays
- Conversion Gain of 35V/W @ 1550 nm
- Low-Noise and Wide-Bandwidth
- Small Footprint Miniature Package
- Hermetically Sealed and Built to GR-468 Standards

Applications:

- Digital Receiver for OC-192/SDH-64 Telecom and Datacom



Typical Frequency Response Curve



Specifications:

Parameter	Min.	Typ.	Max.	Units
Responsivity @ 1.55um	0.6	0.7		A/W
Conversion Gain @ 1.55um	30	35		V/W
Power Gain	8	9	10	dB
Equiv. Transimpedance	40	50		Ω
Gain Flatness		+/-2		dB
Bandwidth (1.55 um)	18	20		GHz
Lower Limit		50		kHz
Noise		15	20	pA/√Hz
Bias Voltage Amp	+4.5	+5	+5.5	V
Bias Voltage PIN	+3	+5	+10	V
Power Dissipation		300		mW@5V
Electrical Return Loss	10	15		dB
Optical Return Loss	30	35		dB
Wavelength response	0.8		1.6	um

Options:

Optical Input:

Pigtail:	1 m Single or Multi-Mode fiber
Fiber buffer:	3 mm std. Opt.:0.9 mm buffer dia.
Connector:	FC, SC, ST, others by request
Finish:	UPC, APC

RF Output:

Connector:	K, female std., male option
Coupling:	50 kHz std.

R401ERe 0110

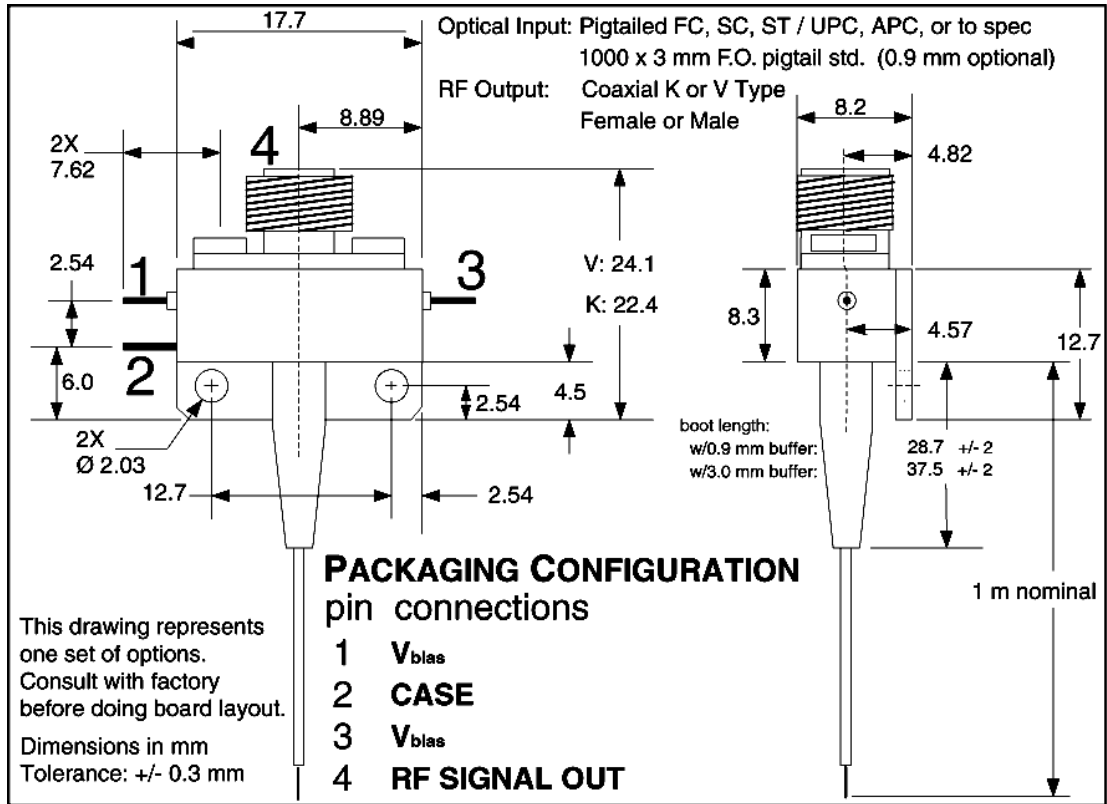
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Specifications are subject to change without notice.

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PACKAGING CONFIGURATION for R401ER



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PIN 1: + 5 Volts

PIN 3: + 5 to 10 Volts

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