

Transceiver Sub-assemblies and Modules

FEATURES:

- ❖ Frequency coverage: 18 to 110 GHz
- ❖ Custom designed
- ❖ High performance

APPLICATIONS:

- ❖ Communication systems
- ❖ Radio systems
- ❖ Radar systems



CTR Series

DESCRIPTION:

Cernex's CTR series transceiver sub-assemblies and modules are offered in the frequency range of 18 to 110 GHz. Due to the nature of the system application, most transceiver sub-assemblies and modules are custom specified. Based on Cernex's extensive in-house passive and active component design and manufacturing capacities, various transceiver sub-assemblies and modules can be produced and delivered to meet the customer's specifications. Common frequency band focuses are K, Ka, Q, V, E and W bands.

SPECIFICATIONS:

Parameters	Specifications	Technical Remarks
Frequency Range	18 to 110 GHz	Other frequency ranges are available upon request
Noise Figure Range, RX	2.0 to 6.0 dB	Frequency band dependent. Specify when ordering
Output P-1 dB Range, TX	20 to 40 dBm	Other P-1 dB is available. Specify when ordering
Linear Gain Range, TX & RX	20 to 60 dB	Other gain ranges are available. Specify when ordering
Gain Flatness	± 1.0 to ± 3.0 dB	Specify when ordering
Gain Control	30 dB	This is a typical value. Specify when ordering
Local Oscillator Type	Free running or PLO	System dependent
Local Oscillator Frequency Range	9.0 to 110 GHz	Depends on up-converter type
Local Oscillator Power Range	0 to 16 dBm	Depends on up-converter type
Local Oscillator Rejection	20 to 40 dB	Other rejections are available. Specify when ordering
IF Input, TX	I/Q	QPSK or higher available
Harmonics rejection	-60 dBc	This is a typical value. Specify when ordering
Spurious	-60 dBc	This is a typical value. Specify when ordering
Port Return Loss	10 dB	This is a typical value. Specify when ordering
Temperature performance	Such as $\Delta G/\Delta T$; $\Delta NF/\Delta T$; $\Delta P-1/\Delta T$	Gain and P1-dB versus temperature. Specify when ordering
Power Supply	Various	Specify when ordering
Connector Type	Various	Specify when ordering
Mechanical Dimensions	Various	Specify when ordering
Environmental	Various	Specify when ordering

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