CERNEX, Inc.

MODEL #CSR343527-01 (Subsystem)

Ka-Band Transceiver

ELECTRICAL SPECIFICATIONS @ T =25°C, 50• SYSTEM

Parameter	Min	Typ	Max	Unit
Input Frequency	17.4		17.85	GHz
Gain	13			dBm
Internal Doublers	Included			
TX Output (GHz)	34.8		35.7	GHz
Gain Flatness			+/-1.0	dB
RF Port match			-12	dB
P1dB	27 Min 26 Min @ -40 &+80°C			dBm
Rx Input	34.8		35.7	GHz
Gain Flatness			+/-0.5	dB
IF Output	0.3		10	MHz
P1dB Min	20			dBm
Conversion Gain			10-12	dB
N.F			13	dB
VSWR (in/out)			2:1	
DC Connectors	SMA-F (+8V, -12V, TTL Control)			
TX and RX Ports	WR28-UG599/U with four M3 threaded holes			
Power Supply Efficiency20%:	0.9A mon.@+8V,1.3A max@P1dB-12V@10mA Typ			
Bias Protection (+8V -12V):	Reverse Polarity Protection with low frequency Filtering			
RF On/Off	TTL Controlled 0V=On, +5V=off, Setting Time: 5 mS Typ			
Spurious	Baseband 1 (50Khz-1.61Mhz)<-95 dbm goal;<-85dbm min. Baseband 2(1.67Mhz-3.33Mhz)<-107 dbm typ.;<-97dbm min Baseband 3 (3.33Mhz-7Mhz)<-117 dbm typ.; <-107dbm min.			
Millimeter-wave spurious	<-50 dbc typ.; <-30 dbc min.			
Millimeter-wave harmonics	<-30 dbc typ.; <-20 dbc min.			
Vibration	per Mil Std 202 method A condition A			
Humidity	up to 95% @ 38C			

ENVIRONMENTAL CHARACTERISTICS

Parameter	Min	Typ	Max	Unit
Operating Temperature	-40		+80	°C
Storage Temperature	-55		+85	°C

MECHANICAL SPECIFICATIONS

Parameter	Value	Units	Limits
Dimensions or Package	4.3x3.25x1.375 max (nickel plated aluminum)	Inch	Max
RF Connectors (In/Out)	WR28 Cover Flange; WR28 through isolator; SMA-F		

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