

Product Specification

CMTRSW-1G1R1G-2K5 HIGH POWER TRANSMIT RECEIVE SWITCH

CMTRSW-1G1R1G-2K5 is a high power transmit / receive switch that operates from 1 GHz to 1.1 GHz. The module handles peak input power levels of 2.5 kW with a maximum pulse width of 17 uS and duty cycle of 2%.

Electrical Specifications

Frequency Range	1-1.1 GHz
Power	2.5 kW Peak (J1 Only)
Pulse Width	17 uS Maximum
Duty Cycle	2% Maximum
PRF	600 Hz
Insertion Loss	0.8 dB Typ, 1 dB Max (J1 to J2) 0.8 dB Typ, 1 dB Max (J1 to J3) 0.8 dB Typ, 1 dB Max (J2 to J4) 0.8 dB Typ, 1 dB Max (J3 to J5)
Isolation	40 dB Min (J2 to J3) 60 dB Min (J2 to J4) 60 dB Min (J3 to J5)
Switching Rate	2 kHz
Switching Time	275 nS Typ (50% TTL to 10% RF to 90% RF)
Power Supply	+50 V @60 mA, +5 V @ 400 mA
RF Connector	SMA Female
Power/Control Interface Connector	9 Pin Micro D-Sub Male
Hot Switching*	No
Cold Switching	Yes
Source and Load Terminations	Better than 1.5:1 VSWR

* Hot Switching will cause damage, Cold Switching only

Mechanical / Environmental Specifications

Housing Material	Aluminum
Finish	Blue Epoxy Polyimide Coating, No Paint on Mounting Surface
Sealing	Hermetic
Dimensions	7.75x 3.00 x 0.575 Inches
Temperature (Base Plate)	Operating: -45C to +85C Storage: -54C to +125C

CNTL1 Logic Table

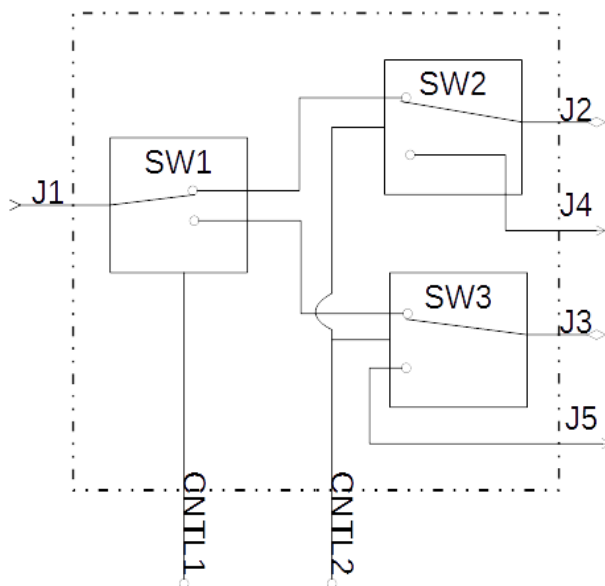
TTL Level	State
Low	J1 to J2, Isolation to J3
High	J1 to J3, Isolation to J2

CNTL1 Logic Table

TTL Level	State
Low**	Receive Mode J2 to J4, Isolation to J1 J3 to J5, Isolation to J1
High	Transmit Mode J2 or J3 to J1 Isolation to J4 and J5

**** When in receive mode no high power to be present at J1**

Functional Block Diagram



Mechanical Drawing

