TELEDYNE
COAX SWITCHES

Coaxial Switch - Frequently Asked Questions

General Questions

Q: What is the difference between Commercial Switches and Elite Switches?
A: The main difference between the 2 is the temperature range. Commercial switches specify an operating temperature of -40°C to +65°C; Elite switches specify an operating temperature of -55°C to +85°C.

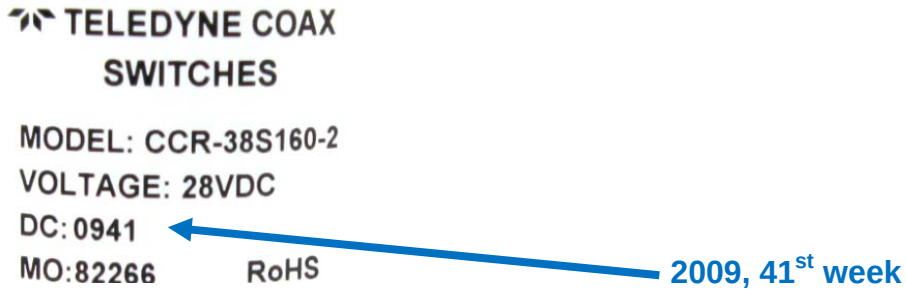
Q: What is the storage temperature range for your coaxial switches?
A: Storage temperature is specified as ±10°C of operating temperature: Commercial: -50°C to +75°C; Elite: -65°C to +95°C

Q: Are your coaxial switches RoHS compliant?
A: Yes. Please see RoHS certificate located at: http://www.teledynerelays.com
Upon request, switches can be ordered with non-RoHS solder and special part number will be assigned.

Q: What type of solder is used in your standard coaxial switches?
A: We use (Sn95/Sb5) solder.

Q: What are the Hi/Low levels for your TTL Driver option?
A: Logic “1” or “Hi”: 2.4-5Vdc, 40µA. Logic “0” or “Low”: 0-0.8Vdc, -0.8mA

Q: Explain the date code and how to find it?
A: The lot number contains 4 digits. The first 2 digits are the year and the second 2 digits are the week (example below)



Q: What is the voltage range for your coaxial switches at 25°C Ambient?
A: We recommend users apply the rated coil voltage. In regards to a voltage range (@25°C ambient), we typically recommend users not to exceed a ±10% of rated coil voltage. Example: CCR-33S10 – 28Vdc rated coil voltage; Voltage range (±10%) 25.2Vdc-30.8Vdc

Q: What is the voltage range for your coaxial switches across the specified temperature range?
A: We recommend users apply the rated coil voltage. In regards to a voltage range (across specified temperature range), we typically recommend users not to exceed a ±5% of rated coil voltage. Example: CCR-33S10 – 28Vdc rated coil voltage; Voltage range (±5%) 26.6Vdc-29.4Vdc across the specified temperature range.

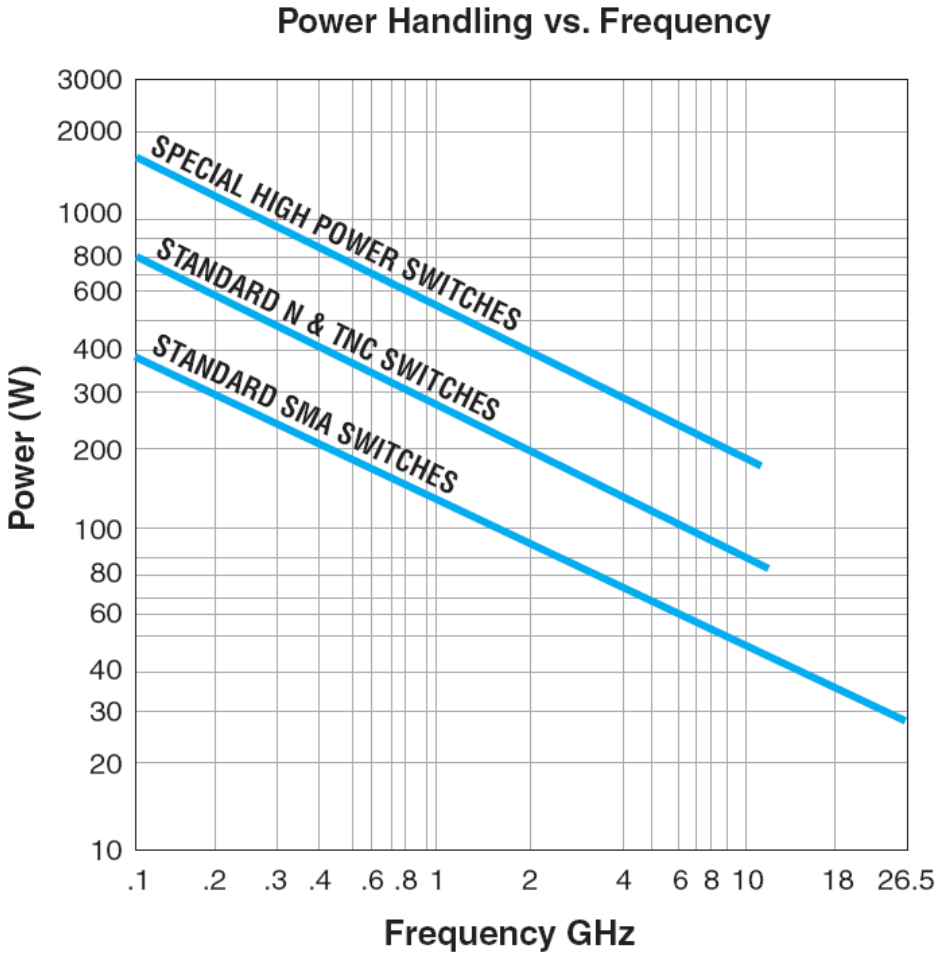
Q: Have you performed any tests to determine whether your switches can operate at high altitude?
A: Yes, we successfully performed a thermal vacuum test at $1x10^{-5}$ Torr and lower (equivalent to 300,000+ feet altitude).

Q: Do you guys have any random vibration data?
A: We performed tests per MIL-STD-202, Method 214, Test Condition I, Test Condition Letter H, the Power Spectral Density is 0.6 and the overall Grms is 29.28. Teledyne Coax Switches subjected one of our SPDTs to this level and higher (up to 34.02 Grms).

Q: Do you guys have shock test data?
A: We performed tests per MIL-STD-202, Method 213, Test Condition G, the mechanical shock test is at 50 G's @ 11 msec, sawtooth waveform.

Q: How much RF power can your switches handle?

A: Please see chart below



Estimates based on the following reference conditions:
- Ambient temperature of 40°C or less
- Sea level operation
- Load VSWR of 1.20:1 maximum
- No high-power (hot) switching

Please contact Teledyne Coax Switches for derating factors when applications do not meet the foregoing reference conditions.