## 7062 7063



- 500 MHz bandwidth
- BNC connectors
- Two independent 1 of 5 switches

Ordering Information
7062 RF Switch Card
7063 RF Switch Card with Terminations

## 7064



- $<1 \mu \mathrm{~V}$ contact potential
- 2-pole Form A relays
- Screw terminal connections


## Ordering Information

7064 20-Channel Low Voltage Scanner Card

## 500MHz RF Switching Cards <br> Model $7062,50 \Omega$ unterminated <br> Model 7063, $50 \Omega$ terminated (on unselected inputs)

The 7062 and 7063 have two independent 1 of 5 switches. Each switch has a separate through connection that can be used to cascade sections to achieve larger scanning configurations in multiples of five. The switched transmission line design maintains the $50 \Omega$ characteristic through the switch, minimizing reflection and loss. This approach results in reduced capacitance and better frequency response. The 7063 inputs are terminated in the $50 \Omega$ characteristic impedance when not selected. A 500 MHz bandwidth assures signal integrity over a broad range from DC to communications signals and digital waveforms. Coaxial switching provides additional shielding and noise immunity in the system environment.

SWITCHES PER CARD: 2 (with isolated grounds). ChanNels PER SWITCH: 5
SWITCH CONFIGURATION: 1 -pole, 5 throw.
EXPANSION: A through connector is provided for cascading switches.
CONNECTOR TYPE: BNC.

## Low Voltage Scanner Card 20-Channel

The Model 7064 has 20 channels and features $<1 \mu \mathrm{~V}$ thermal offset. It will switch any one of twenty signals to one output or switch one signal to any one of twenty outputs. Switching is accomplished in less than 2 ms . Expected relay life ( $10^{8}$ closures) is obtained when signals less than 10 V or 10 mA are switched.


RELAY DRIVE CURRENT: 100 mA per relay typical.
ACTUATION TIME: 10 ms exclusive of mainframe.
RELEASE TIME: 5 ms .
CHARACTERISTIC IMPEDANCE: $50 \Omega$.
TERMINATIONS: 7062: None. 7063: 50 $\Omega$ on unselected inputs. PROPAGATION DELAY: <2ns.
INSERTION LOSS: $<0.1 \mathrm{~dB}$ below $20 \mathrm{MHz},<1.0 \mathrm{~dB}$ below 250 MHz , and $<3.0 \mathrm{~dB}$ below 500 MHz .
ISOLATION CHANNEL (switch to channel): $>75 \mathrm{~dB}$ below $20 \mathrm{MHz},>55 \mathrm{~dB}$ below 250 MHz , and $>60 \mathrm{~dB}$ below 500 MHz .
ISOLATION (switch to switch): $>80 \mathrm{~dB}$ below $20 \mathrm{MHz},>70 \mathrm{~dB}$ below 250 MHz , and $>60 \mathrm{~dB}$ below 500 MHz .
MAXIMUM SIGNAL LEVEL: 24 V on Model 7062, 5 V on Model
7063 , switched; $50 \mathrm{~mA} ; 0.5$ watt switched.
CONTACT LIFE: $>10^{6}$ closures cold switching; $>10^{5}$ closures at maximum signal levels.
CONTACT RESISTANCE: $<2 \Omega$ input to output.
CONTACT POTENTIAL: $<20 \mu \mathrm{~V}$.
ACCESSORIES AVAILABLE
7051-2 BNC Male to BNC Male Cable, 2 ft .
7051-5 BNC Male to BNC Male Cable, 5 ft .
7051-10 BNC Male to BNC Male Cable, 10ft.

CHANNELS PER CARD: 20.
CONTACT CONFIGURATION: 2-pole Form A, common guard connection.
CONNECTOR TYPE: Screw terminal \#18AWG maximum wire size.
RELAY DRIVE CURRENT: 14 mA per relay typical.
MAXIMUM SIGNAL LEVEL: $40 \mathrm{~V}, 100 \mathrm{~mA}$, or 2 VA (resistive load only).
CONTACT LIFE: $>10^{8}$ closures cold switching; $>10^{6}$ closures at maximum signal levels.
CONTACT RESISTANCE: $<2 \Omega$ to rated life.
CONTACT POTENTIAL: $<1 \mu \mathrm{~V}$ differential voltage, input to out-
put with copper leads ( $<200 \mathrm{nV}$ typical within 1 minute of actuation).
WARM-UP: 1 hour in mainframe for thermal stability. ACTUATION TIME: $<2 \mathrm{~ms}$, exclusive of mainframe.
CHANNEL ISOLATION: $>10^{12},<10 \mathrm{pF}$.
INPUT ISOLATION, DIFFERENTIAL: $>10^{\circ} \Omega,<75 \mathrm{pF}$.
INPUT ISOLATION, COMMON MODE: $>10^{\circ} \Omega,<150 \mathrm{pF}$.
COMMON MODE VOLTAGE: $<100 \mathrm{~V}$ peak.
OPERATING ENVIRONMENT: $0^{\circ}$ to $50^{\circ} \mathrm{C}$, up to $35^{\circ} \mathrm{C}$ at $70 \% \mathrm{RH}$. STORAGE ENVIRONMENT: $-25^{\circ} \mathrm{C}$ to $65^{\circ} \mathrm{C}$.

