SI 5010
Programmable Scanner/Multiplexer

- Command Buffer for Controller-Free Operation
- Software configurable as:
  1 Group of 16 Channels
  2 Groups of 8 Channels
  4 Groups of 4 Channels
- 350 MHz Bandwidth in 4-Channel Configuration
- External Handshake Lines
- Built-In Time-of-Day and Pacing Clock

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**CHARACTERISTICS**

**RF Connectors** – 20 BNC connectors, 16 channels and four commons.

**Control Input (Ext Trig)** – TTL compatible.

**Control Output Data Accepted (Ready)** – TTL compatible. Output goes high when relays have settled.

**Channel Configuration (Software Selectable)** – 1, 2, 3, or 4 groups of 4 channels, 2 groups of 8 channels, 1 group of 16 channels.

**Frequency Response** – Any 1 Group of 4: 3 dB at 350 MHz, decreasing to 0 dB at 500 MHz or greater. Any 1 Group of 8: 3 dB at 175 MHz or greater. Any 1 Group of 16: 3 dB at 80 MHz or greater.

**Port (Channel) Isolation** – 40 dB at 100 MHz.

**Characteristic Impedance (Each Channel)** – 50 Ω. See VSWR specification.

**Rise Time (Each Channel)** – 1 ns.

**Voltage Standing Wave Ratio (VSWR)** – Any 4 Channel Group: 1.25:1 at 100 MHz, increasing to 1.8:1 at 350 MHz. Any Other Combination: 1.5:1 at 100 MHz, 2.1:1 at 225 MHz.

**Insertion Loss** – 1 dB at 100 MHz.

**Channel Delay Matching** – Any Group of 4: 50 ps. Any Group of 8: 110 ps. Any Group of 16: 310 ps.

**Type of Relays** – 16 Form A, 4 Form C. Pull-In Time: 3 ms. Release Time: 3 ms. Breakdown Voltage: 350 V (dc + peak ac). Series Path Resistance (End of Life): 0.5 Ω.

**Peak Carry Voltage** – Unterminated: 40 V maximum. 50 Ω Terminated: 12.5 V maximum.

**Peak Contact Current** – 0.25 A maximum.

**Peak Switching Voltages** – Unterminated: 15 V maximum. 50 Ω Terminated: 3.73 V maximum.

**Peak Switching Current** – 0.01 A maximum.

**CUSTOM PLUG-IN KITS**

**SINGLE COMPARTMENT WITH POWER SUPPLY BOARD (040-0803-02)**

The kit includes parts and a pre-etched circuit board layout for (1) a ground-referenced positive and negative supply, capable of 7 to 20 V at up to 400 mA, and (2) a ground-referenced supply, nominally 5 V, not adjustable, with up to 1 amp current capability. The circuit board includes the edge-connector interface and has about 30 square inches of 0.1" grid perforated board with plated holes for circuit development (see below).

**SINGLE COMPARTMENT WITH DEVELOPMENT BOARD (040-0652-05)**

This kit comes without the power supply components or the pre-etched power supply circuit. The board includes the edge-connector interface and has about 35 square inches of board development area.

**SINGLE COMPARTMENT WITHOUT BOARD (040-0821-03)**

This kit comes without a board for applications where custom circuit boards are fabricated.

**DUAL COMPARTMENT WITH DEVELOPMENT BOARDS (040-0754-07)**

This kit has two development boards (30 and 35 square inches of development area) for applications requiring additional power, circuit area, or front panel space.

**ORDERING INFORMATION**

**SI 5010 Programmable Scanner**

Includes: Instruction manual (070-3721-00); Instrument interface guide; Reference guide.

**RECOMMENDED PROBES**

P6155—10X Passive $255
P6156 Opt. 28—100X Passive $315
P6228A—FET $225
P6230—Bias/Offset $525

**ORDERING INFORMATION**

**Single Compartment with Power Supply Board**

Order: 040-0803-03 $180

**Single Compartment with Uncommitted Board**

Order: 040-0652-06 $135

**Single Compartment Without Board**

Order: 040-0821-04 $78

**Double Compartment with Two Boards**

Order: 040-0754-07 $280

**Rear-Interface Data Book**

Order: 070-2008-04 $27

**Flexible Extender Cable**

Order: 067-0645-02 $470