

RI 2583

SOLID STATE SWITCH

SP8T Solid state switch module, terminated, I²C, 0.01 - 6 GHz



OVERVIEW

RI 2583 is a solid-state switch module with 1 pole and 8 throws. It is very well suited for high volume testing where long lifetime is required without sacrificing RF performance. RI 2583 offers good linearity, power handling and speed.

APPLICATIONS

RI 2583 Solid state switch module is designed for applications such as:

- Production testing of mobile handsets
- Production testing of mobile basestations
- Built-In-Test (BITE) applications
- MIMO applications

CONTROL INTERFACE

RI 2583, Molex 502584-0570	Function
PIN 1	GND
PIN 2	SDA
PIN 3	VCC (4-30 VDC)
PIN 4	SCL
PIN 5	GND
• 8 I²C-bus addresses selectable via DIP switch • 0-400 kHz I²C clock • 50 µs max switch settling time after data transfer • High repeatability and Ultra-long lifetime	
Switch mode	SP8T I2C ctrl, terminated
Supply voltage	4-30 VDC
Supply current max 8mA	Supply current max 8mA
I ² C-bus LOW-level	0.99 V
I ² C-bus HIGH-level	2.31 V
I ² C-bus MAX-level	5.5 V

Operating frequency	0.01-6 GHz
Impedance	50 Ohm
Max DC at RF inputs	0 VDC
VSWR (max) RFC→RFx	1.67:1 @ 0.1-0.698 GHz 1.45:1 @ 0.7-3 GHz 1.60:1 @ 3-6 GHz
VSWR (max) RFx→RFC	1.50:1 @ 0.01-0.7 GHz 1.35:1 @ 0.7-3 GHz 1.40:1 @ 3-6 GHz
VSWR RFx terminated (max)	1.45:1 @ 0.01-0.7 GHz 1.35:1 @ 0.7-3 GHz 1.50:1 @ 3-6 GHz
Insertion loss (max)	2.5 dB @ 0.01-0.7 GHz 3.1 dB @ 0.7-3 GHz 4.3 dB @ 3-6 GHz
Isolation (min) RFC-RFx	55 dB @ 0.01-0.7 GHz 40 dB @ 0.7-3 GHz 35 dB @ 3-6 GHz
Isolation (min) RFx-RFy	55 dB @ 0.01-0.7 GHz 40 dB @ 0.7-3 GHz 30 dB @ 3-6 GHz
Input power thru path (max)	30 dBm @ 0.01-6 GHz
Input power (max) (hot switching & into termination)	20 dBm @ 0.01-6 GHz
Input IP3 (typ)	63 dBm @ 0.01-6 GHz
Operating temperature	0°C to +50°C
Storage temp	-20°C to +70°C
Relative humidity	95% at +40°C
Dimensions	50x56x22 mm
Weight	44 g
Connectors	SMA (f)

ORDERING

RI 2583	SP8T solid state switch
RI 2583-02	Optional 90° mounting bracket
RI 2583-03	Optional cable