

## Coaxial Relay RU2-53G40-C

MTS-No.: 20399

### Short description

The SPDT Relay model RU2-53G40-C is used to switch various signals. It was developed to work at frequency ranges between DC and 3000 MHz. This switch fits for most of mobile applications (GSM, DECT, UMTS, Bluetooth, etc.) and for satellite communication (L-Band).



### Technical data:

#### 1 RF-specifications:

1.1 Relay type	SPDT
1.2 Impedance	50 Ω
1.3 Input power (cold switching)	10 W max. (2 A DC max; 20 V DC/AC max.)
1.4 Frequency range	DC - 3000 MHz (usable up to 3800 MHz)
1.5 Switching time max.	10 ms (max. 50 operations / s)
1.6 Life cycles	10 000 000 cycles
1.7 VSWR In / Out < 3000 MHz	1,15 : 1 typ.; 1,35:1 max. @ switched connection (open connection is not terminated)
1.8 Insertion loss < 1000 MHz @ 2000 MHz < 2000 MHz @ 3000 MHz < 3000 MHz	0,15 dB max. 0,2 dB typ. 0,3 dB max. 0,3 dB typ. 0,4 dB max.
1.9 Isolation < 1000 MHz < 2000 MHz < 3000 MHz	62 dB typ., 58 dB min. 50 dB typ., 45 dB min. 40 dB typ., 35 dB min.

#### 2 Connections:

2.1 RF-input	1x SMA female
2.2 RF-outputs	2x SMA female
2.3 Voltage supply	5 V DC feedthrough filter and ground feedthrough filter

#### 3 General specifications:

3.1 Power supply	5 V DC ± 5 % (12 V or 24 V also available)
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3.2 Power consumption primarily	0,035 A typ. @ 5 V DC
3.3 Configuration	If switch is out of order, one path is closed, all other contacts are floating
3.4 Control input	Floating (one side on a common line)
3.5 Operating temperature	0 °C - +50 °C
3.6 Reference temperature for specifications	+25 °C
3.7 Dimensions (without connections)	40 mm x 30 mm x 19mm (L x W x H)
3.8 Case style	Milled aluminium enclosure
3.9 Colour	SurTec650 (chromit Al)
3.10 Weight	Approx. 0,1 kg

#### 4 Delivered parts:

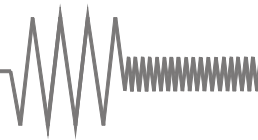
Coaxial relay RU2-53G40-C  
Drawing and connector pin assignment

#### 5 Comments:

Warranty	12 months
RoHS-compliant	Yes

#### 6 Recommended accessories:

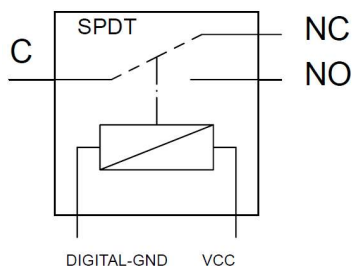
Control cards  
RF-cables



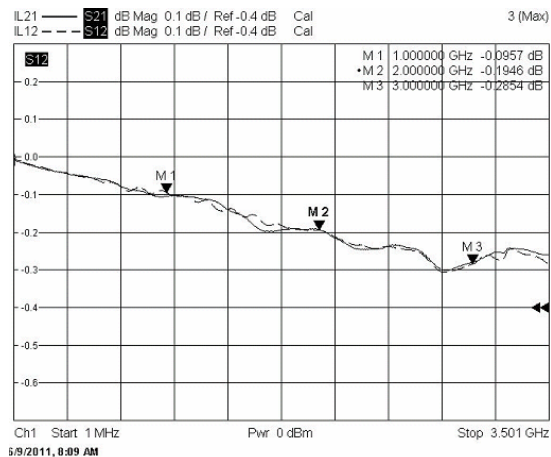
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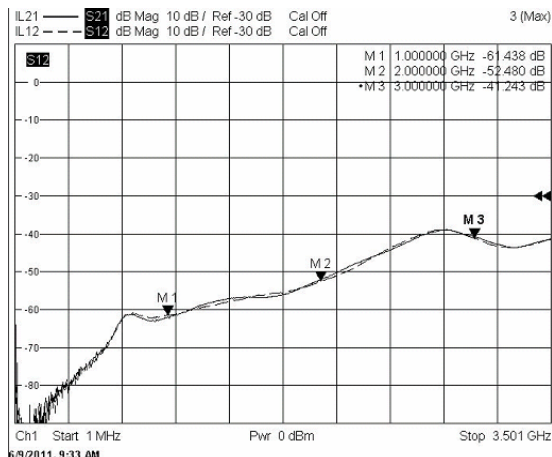
## Diagrams:



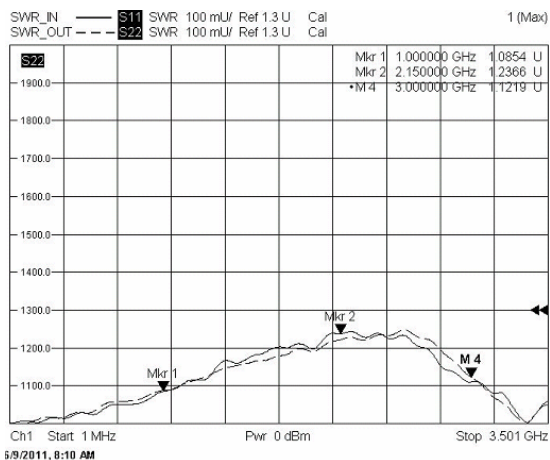
## Switching diagram



Insertion loss from common to NC and NO



Isolation from NC to NO



VSWR of switched path