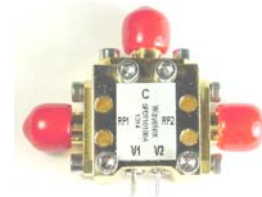


Key Features

- Wide band, 1.0 ~ 20.0 GHz
- Low insertion loss, 1.50 dB typ.
- 30 dBm power handling.
- 50 nS speed, SPDT
- Built in DC block
- Precision machined housing
- RoHS compliant

Applications

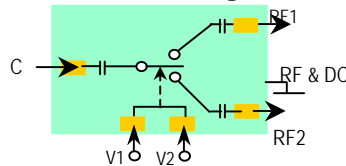
- S to Ku Band
- Satellite communications
- Broadcast
- RF bench test
- Mobile base station applications



Absolute Maximum Ratings

Input Power, CW	30 dBm
Maximum Hot Switch	27 dBm
DC Control Voltage	-6.0, +0.5V
Storage Temperature	-40°C to +85°C

Functional Block Diagram



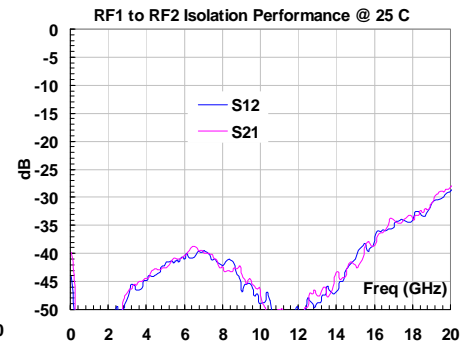
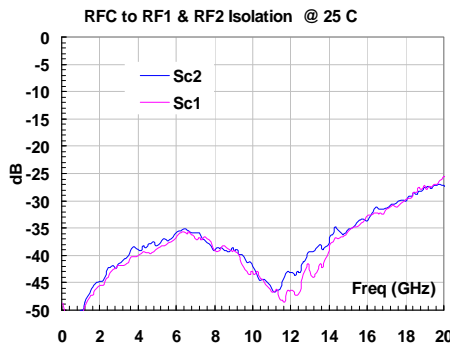
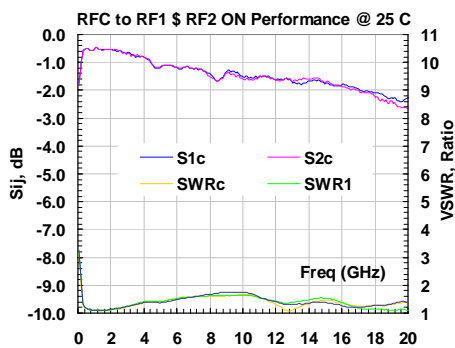
Ordering Information

Model		Connectors	
WSW10180A		SMA Female	
V ₁	V ₂	RF1	RF2
LOW	HIGH	ON	Isolation
HIGH	LOW	Isolation	ON

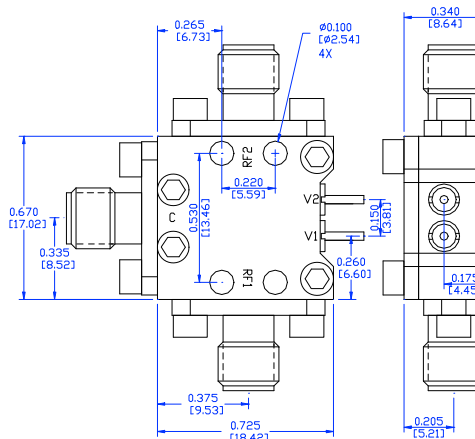
Specifications (Tested at +25°C)

Item	Symbol	Test Constraints	Min	Typ	Max	Unit
Frequency Range	BW	50 Ohm Impedance	1.0		20.0	GHz
Insertion Loss	S ₂₁ , S ₃₁	1 – 20 GHz, in Contact Path, with SMA Connectors		1.5	2.8	dB
Isolation	S ₂₁ , S ₃₁	1 – 20 GHz, In Isolation Path	27	35		dB
VSWR	SWR _i	1 – 20 GHz, all ports		1.5:1	2.0:1	Ratio
Maximum Power Handling	P _{MAX}	1 – 20 GHz, CW			30	dBm
Switching Speed	t _s	1 – 20 GHz, 10% to 90% RF and 90% to 10% RF		50	100	nS
Control Voltage, High	V _{ch}		-0.2	+0	+0.2	V
Control Voltage, Low	V _{cl}		-6.0	-5.0	-4.0	V
Operating Temp	T _o		-40		+85	°C

Typical Performance



Outline



- NOTES**
1. MATERIAL: Brass
 2. TOLERANCE IS NON-ACCUMULATIVE
 3. FINISH:
 - A. DEBURR AND BREAK SHARP EDGES
 - B. 10 micro Inch maximum gold plating.
 4. All SMA F connectors are field replaceable.