

RF SWITCHES



RF Switches for GSM and CDMA Applications

ANADIGICS RF Switch Products

ANADIGICS Advantage

ANADIGICS RF switches utilize a state-of-the-art 150mm GaAs wafer production platform to deliver high performance, reliable and low cost switch solutions. Manufactured using an advanced pHEMT process, ANADIGICS RF switches employ innovative circuit topologies to provide low insertion loss, high port-to-port isolation, and high linearity needed to enhance the performance of wireless radios.

- Ideal for multi-mode, multi-band terminals: GSM-WCDMA, GSM-EDGE, GSM-GPS, CDMA-GPS
- High linearity
- High isolation
- Low insertion loss
- Small form factor 3mm x 3mm footprint
- Low cost 150mm wafer production
- Reliable pHEMT technology

Part Number	Switch Type	Application	Insertion Loss (dB)		Isolation (dB)		Harmonics (dBm) ²		TOI (dBm) ³		Package
			1000MHz	2000MHz	1000MHz	2000MHz	+34dBm @ 1000MHz	+32dBm @ 2000MHz	900MHz	1900MHz	
AWS5518	SPDT	General	0.35	0.45	32	24			48	46	SOT-26
AWS5522	SPDT	GSM	0.41	0.49	27	27	-45/-54	-46/-50	62	59	MLF3X3_12LD/Die
AWS5523	SP3T	GSM	0.42	0.58	27	27	-43/-52	-42/-43	62	59	MLF3X3_12LD/Die
AWS5524	SP4T	GSM	0.51	0.80	27	27	-39/-52	-41/-48			Die
AWS5526	SP3T	GSM	0.45/0.65 ⁶	0.60/0.90 ⁶	27/44 ⁶	27/41 ⁶	-45/-50	-42/-52			Die
AWS5533	SP3T	CDMA	0.45	0.7	28	27			66	60	MLF3X3_12LD
Part Number	Switch Type	Application	Insertion Loss (dB)		Isolation (dB)		Package				
			2400MHz	5200MHz	2400MHz	5200MHz					
AWS5550	DPDT	WLAN 802.11a		0.9		25	MLF3X3_12LD/Die				
AWS5551	DPDT	WLAN 802.11g/b	0.7		21		MLF3X3_12LD/Die				

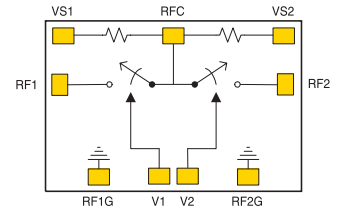
- Notes:
1. All data is typical performance at a control voltage Vc = 2.7 Volts and 25 degrees C.
 2. Data is given for 2nd and 3rd Harmonic with Vs (common RF port) bias to a logic high voltage level.
 3. TOI data does not have the Vs bias connected.
 4. Return Loss of the ON path is typically > 18dB. The off paths return loss is approximately < 3dB.
 5. All measurement are taken in a 50 ohm system.
 6. Second value represents the performance of the high isolation path of the switch.

AWS5518 – SPDT Reflective Switch DC-2.0 GHz

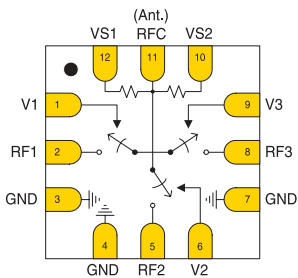
The AWS5518 is a single pole double throw (SPDT) GaAs MMIC switch assembled in a SOT-26 plastic package. The switch is designed for applications that require low insertion loss, high isolation, high linearity, and small size. The switch can be controlled with positive, negative, or a combination of both voltages.

AWS5522 – 0.5 to 2.5 GHz SPDT Switch

The AWS5522 is a SPDT RF switch developed to meet the stringent requirements of GSM and CDMA systems. Manufactured in ANADIGICS state-of-the-art pHEMT process, the device uses patent-pending circuit topologies to provide the low insertion loss, high port-to-port isolation and high linearity needed to enhance the performance of wireless handset radios.



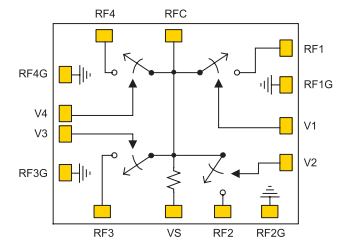
AWS5523 – 0.5 to 2.5 GHz SP3T Switch



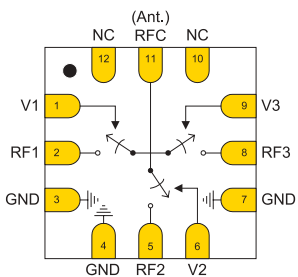
The AWS5523 is a single pole three throw (SP3T) RF switch designed to meet the stringent requirements of GSM systems. Manufactured in ANADIGICS state-of-the-art pHEMT process, the device uses patent-pending circuit topologies to provide the low insertion loss, high port-to-port isolation and high linearity needed to enhance the performance of GSM wireless handset radios.

AWS5524 – 0.5 to 2.5 GHz SP4T Switch

The AWS5524 is a single pole four throw (SP4T) RF switch developed to meet the stringent requirements of GSM systems. Manufactured in ANADIGICS state-of-the-art pHEMT process, the device uses patent-pending circuit topologies to provide the low insertion loss, high port-to-port isolation and high linearity needed to enhance the performance of GSM wireless handset radios.



AWS5533 – 0.5 to 2.5 GHz SP3T Switch



The AWS5533 is a SP3T RF switch developed for CDMA systems. Manufactured in ANADIGICS state-of-the-art pHEMT process, the device uses patent-pending circuit topologies to provide the low insertion loss, high port-to-port isolation and high linearity needed to enhance the performance of CDMA wireless handset radios.

The Right Solutions

You'll find that when it comes to size, multi-band operation and power efficiency, ANADIGICS has proven itself to be one of the most innovative designers and manufacturers of integrated circuits in the global wireless marketplace. By providing solutions for the North American, European, and growing Asian marketplace, the Company has established itself as a leading industry partner and contributor to our generation's journey toward a truly wireless society.

At ANADIGICS, you can rely on radio frequency (RF) experts to provide you with power amplifiers, switches, and integrated front end modules that have been adopted in cellular and PCS handsets, as well as WLAN systems, by the world's leading original equipment manufacturers. It is our mission to provide you with reliable solutions that can be quickly and easily integrated into portable wireless products, helping you to achieve a faster time-to-market. In today's competitive marketplace, a matter of weeks can be crucial.

We'll provide you with the power that enables your wireless product users to have longer talk-time and standby time. We'll provide you with the technology that enables your handsets to offer more functionality than ever before, and enables you to develop third-generation handsets and beyond. And, you can count on ANADIGICS to provide the consistency that ensures your handset and PDA users have reliable access, time-after-time, with voice and data quality comparable to land lines.

The Right Technology

As an ANADIGICS customer you'll benefit from our investment in state-of-the-art manufacturing facilities and the cost savings of our six-inch GaAs wafer manufacturing capability. And through our InGaP HBT, PHEMT and integrated passive processes, we are able to guarantee high volumes of high quality products to satisfy your commercial applications in the emerging wireless marketplace.

Technology, however, means nothing without the backing of our world-class applications support team, which has been developed to ensure that you receive the right products, on-time, to make your wireless product designs a reality.

The Right Supplier – ANADIGICS



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微波光电部专业代理经销高频、微波、光纤、光电元器件、组件、部件、模块、整机；电磁兼容元器件、材料、设备；微波 CAD、EDA 软件、开发测试仿真工具；微波、光纤仪器仪表。欢迎国外高科技微波、光纤厂商将优秀产品介绍到中国、共同开拓市场。长期大量现货专业批发高频、微波、卫星、光纤、电视、CATV 器件：晶振、VCO、连接器、PIN 开关、变容二极管、开关二极管、低噪晶体管、功率电阻及电容、放大器、功率管、MMIC、混频器、耦合器、功分器、振荡器、合成器、衰减器、滤波器、隔离器、环行器、移相器、调制解调器；光电子元件和组件：红外发射管、红外接收管、光电开关、光敏管、发光二极管和发光二极管组件、半导体激光二极管和激光器组件、光电探测器和光接收组件、光发射接收模块、光纤激光器和光放大器、光调制器、光开关、DWDM 用光发射和接收器件、用户接入系统光收发器件与模块、光纤连接器、光纤跳线/尾纤、光衰减器、光纤适配器、光隔离器、光耦合器、光环行器、光复用器/转换器；无线收发芯片和模组、蓝牙芯片和模组。

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