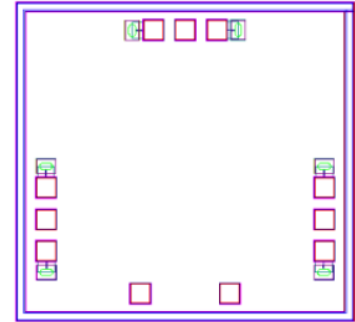


AMT1716
26 - 32GHz SPDT Switch Chip



Key Features :

- Frequency range : 26 – 32GHz
- Insertion loss : 0.8dB
- Isolation : 43dB
- Input power P-1 : 27dBm
- Switching time : 25ns
- Control method : +5V/-5V
- Chip dimensions : 1.55mm x 1.46mm x 0.1mm
- Applications : wireless communication, transceiver module, radio telecommunication etc.

Description :

AMT1716 is a SPDT switch chip, it is designed by PIN Diode MMIC process. This chip is designed with ground through metal vias on the back technology. All chip products p are 100% RF tested. It uses +5V, -5V level control, typical insertion loss is 0.8dB, isolation is 43dB, input standing wave is 1.1 : 1, output standing wave is 1.2 : 1, switching time is 25ns.

Absolute Maximum Ratings (Ta = 25°C)

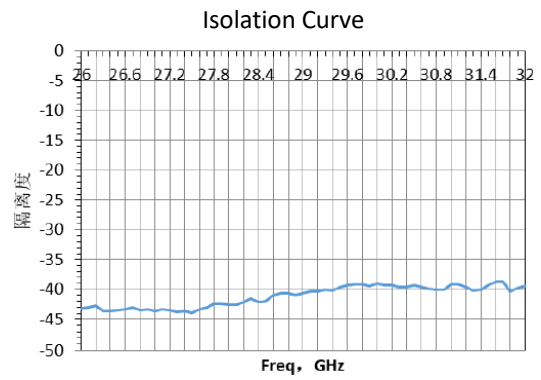
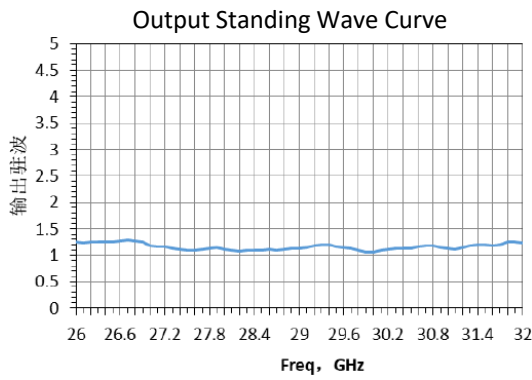
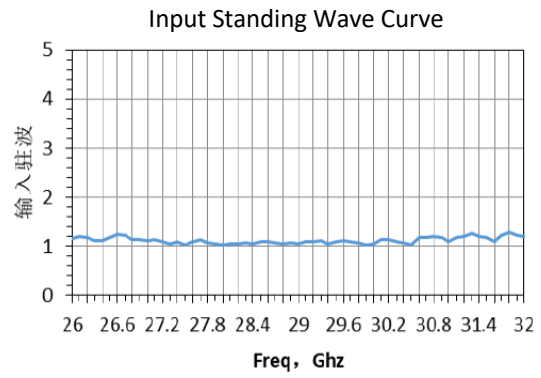
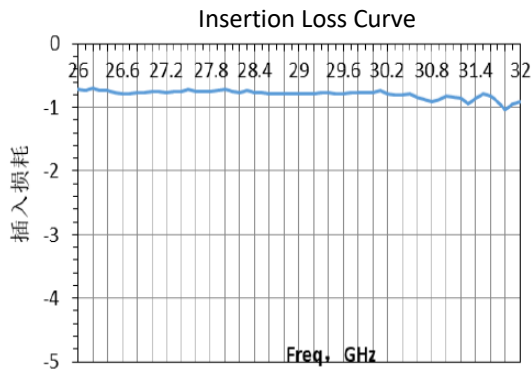
Symbol	Parameter	Value	Remark
V1, 2	Control voltage	+8V/-3V	
Pin	Input Power	23dBm	
Tm	Sintering Temperature	310°C	30s, N ₂ protection
Tstg	Storage Temperature	-65 ~ +150°C	

[1] Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

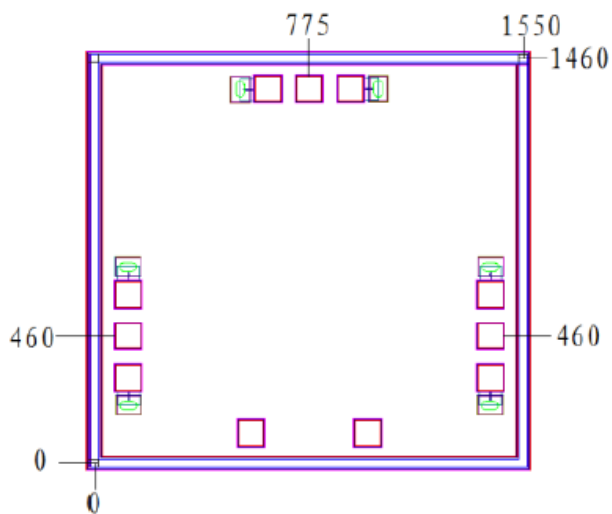
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Value			Unit
		Min	Typical	Max	
VSWRin	Input standing wave	-	1.1	1.3	
VSWRout	Output standing wave	-	1.2	1.4	
IL	Insertion Loss	-1.1	-0.8	-	dB
ISO	Isolation	-	-43	-38	dB

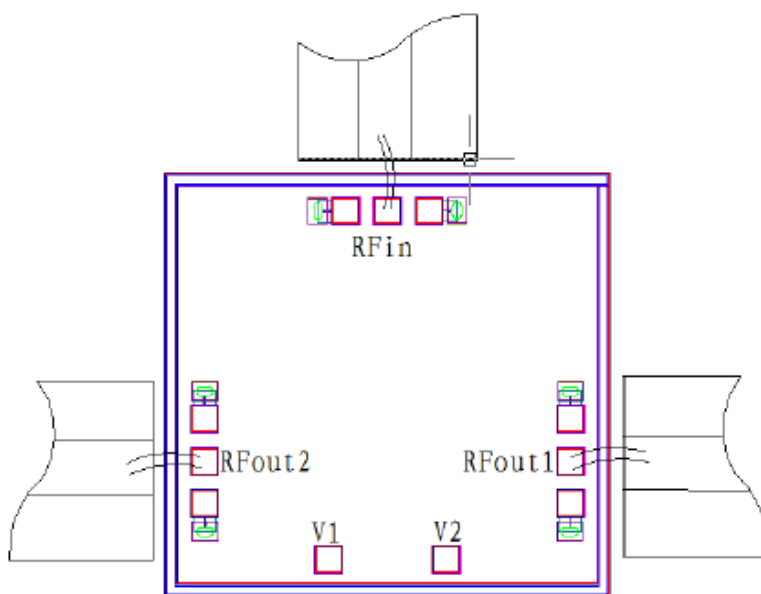
Typical Performance



Chip Dimensions (Unit : μm)



Chip Layout Diagram



Truth Table

	V1	V2
RFin – RFout1	+5V	-5V
RFin – RFout2	-5V	+5V
Off	+5V	+5V

Please see Appendix A for details.