AMT1807 6 – 18GHz Power Divider Chip

Key Features:

• Frequency range: 6 – 18GHz

Input/output standing wave : 1.4/1.2

Insertion loss: 1.6dBIsolation: 22dB

• Chip dimensions: 1.85mm x 1.1mm x 0.1mm

• Applications: transceiver module, RF microwave system etc.



Description:

AMT1807 is a 1-to-4 power divider chip designed by Gallium Arsenide (GaAs) process, it covers 6 – 18GHz frequency range, with typical 22dB isolation. This chip is designed with ground through metal vias on the back technology.

Absolute Maximum Ratings (Ta = 25°C)

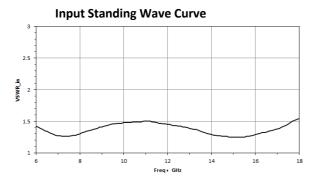
Symbol	Parameter	Value	Remark	
Pin	Input Power	+37dBm		
Tch	Operating Temperature	150°C		
Tm	Sintering Temperature	310°C	30s, N ₂ protection	
Tstg	Storage Temperature	-65 ~ +150°C		

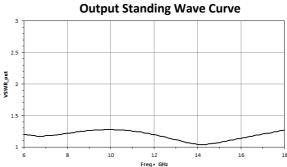
[1] Operation outside any of the Absolute Maximum Ratings may cause permanent device damage.

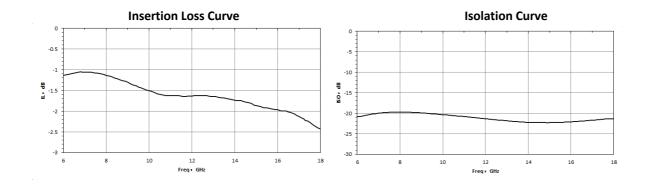
Electrical Characteristics (Ta = 25°C)

Symbol	Parameter	Test Conditions	Value		Unit	
			Min	Typical	Max	
VSWR_in	Input Standing Wave		=	1.4	1.7	ı
VSWR_out	Output Standing Wave	Pin = 0 dBm	-	1.2	1.7	-
IL	Insertion Loss	F:6~18GHz	-	1.6	2.5	dB
ISO	Isolation		18	22	-	dB

Typical Performance

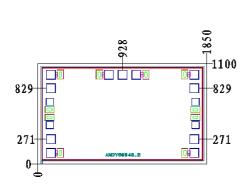


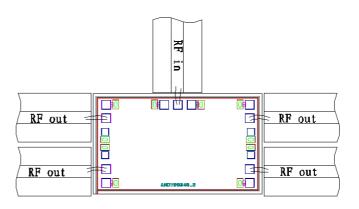




Chip Dimensions (Unit: µm)

Chip Layout Diagram





Please see Appendix A for details.