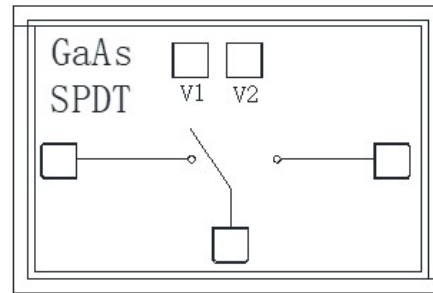


Performance

- Technology: PHEMT
- Frequency: 33~37GHz
- Insertion Loss: 1.5dB
- Isolation: 40dB
- Input/Output VSWR: 1.2:1
- Switch time: 10ns
- Control: -5V/0V
- Chip size: 1.0*1.2*0.08mm

Schematic Diagram

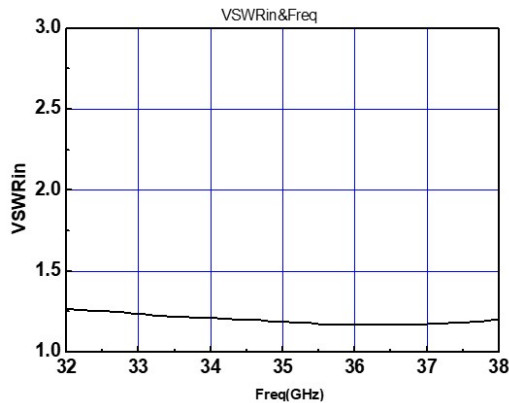


Electrical Specifications (Ta=+25°C, V1, V2=0/-5V control, Freq: 33~37GHz, 50Ω system)

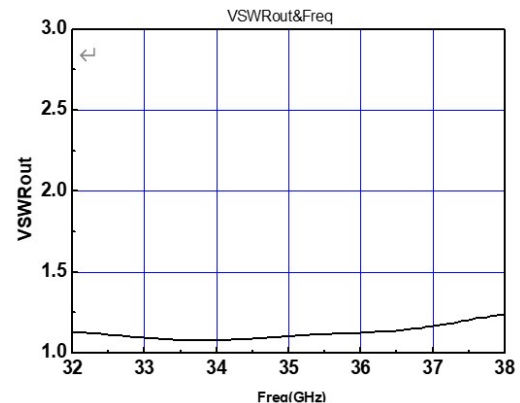
Symbol	Parameter	Min	Typical	Max	Unit
Li	Insertion Loss	-	1.4	1.5	dB
ISO	Isolation	-	-40	-40	dB
VSWRin	Input VSWR	-	1.2	1.3	-
VSWRout	Output VSWR	-	1.2	1.3	-

Test Curves (Two pieces of Φ25um, 300um length bonding lines applied)

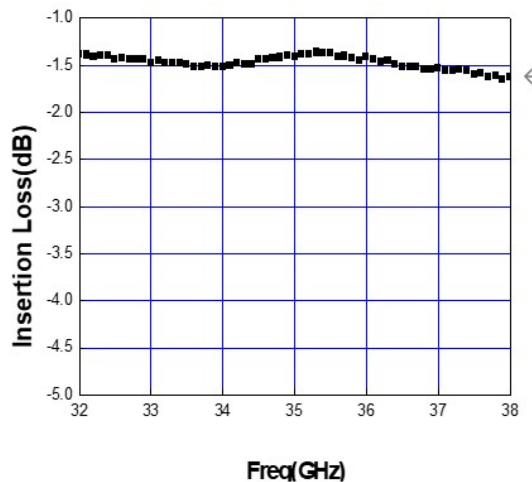
Input VSWR vs. Freq



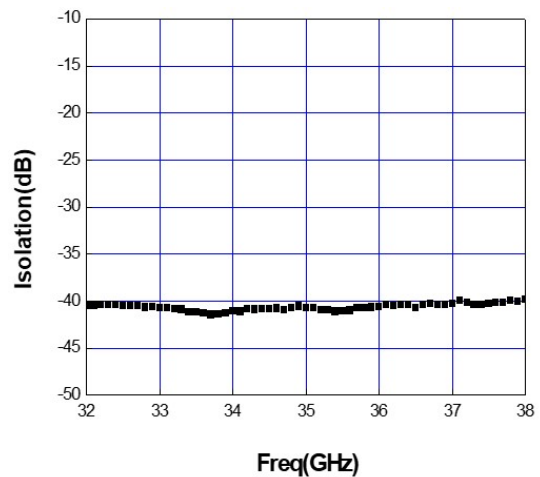
Output VSWR vs. Freq



Insertion Loss vs. Freq



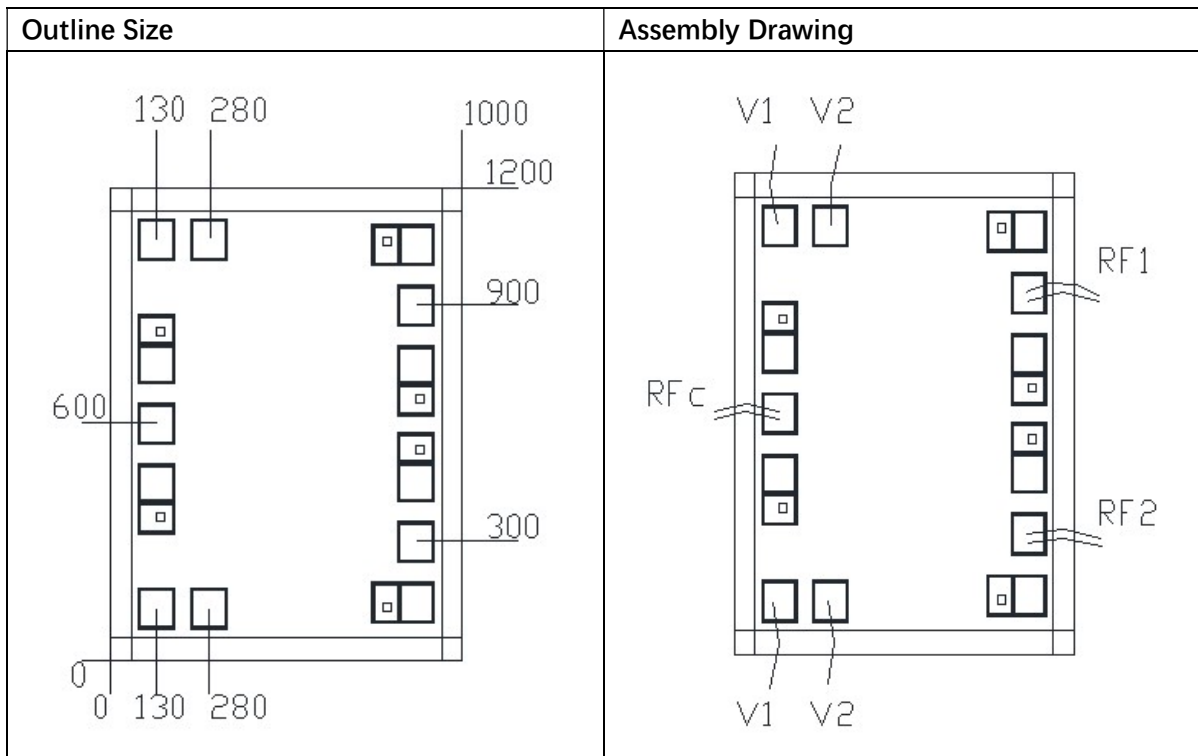
Isolation vs. Freq



Absolute Ratings (TA=25°C)

Symbol	Parameter	Value	Note
V1, 2	Control Voltage	0.6/-8V	
P _{cw}	Input signal Power (cw)	25dBm	
T _{ch}	Channel Temperature	150°C	
T	Sintering Temperature	300°C	1min, N2 protection
T _{stg}	Storage Temperature	-55°C~150°C	

Exceed any of above condition may cause permanent damage.



Truth Table

V1	V2	RFC—RF1	RFC—RF2
-5V	0V	On	Off
0V	-5V	Off	On

Pad Definition

Number	Description
RFc	RF input port, connect to 50Ω system, no block capacitor needed.
RF1, RF2	RF output port, connect to 50Ω system, no block capacitor needed.
GND	Bottom must be grounded
V1, V2	Control voltage