

The TURDP18G40G-3606 is a 6-bit digital phase shifter, Step size is 5.6° providing phase shift from 0° to 360° in 5.6° steps. This design has been optimized to minimize variation in attenuation over the phase shift range. The TURDP18G40G-3606 is ideally suited for use where high phase accuracy with minimum loss variation over the phase shift range are required. Typical applications include communications antennas and phased array radars.

Features:

- Ultra Wide Band: 18-40GHz
- High Phase Shift Accuracy
- High Phase Shift Range
- Low Phase Error

Applications:

- Communications antennas
- Phased array radars

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	18		40	GHz
插损 Insertion Loss		17	20	dB
输入驻波 Input VSWR		2	2.5	:1
输出驻波 Output VSWR		2	2.5	:1
移相范围 Phase Shift Range		360		°
相位精度 Phase accuracy		±10		°
耐功率 Power Handing			25	dBm
相位相关插损波动 Insertion loss variation over phase range			±1	dB
切换时间 Switching speed		100		ns
直流电压 DC Voltage		+5		V DC
直流电流 DC Supply Current		30		mA
控制位数 Number of Bits		6		Bit

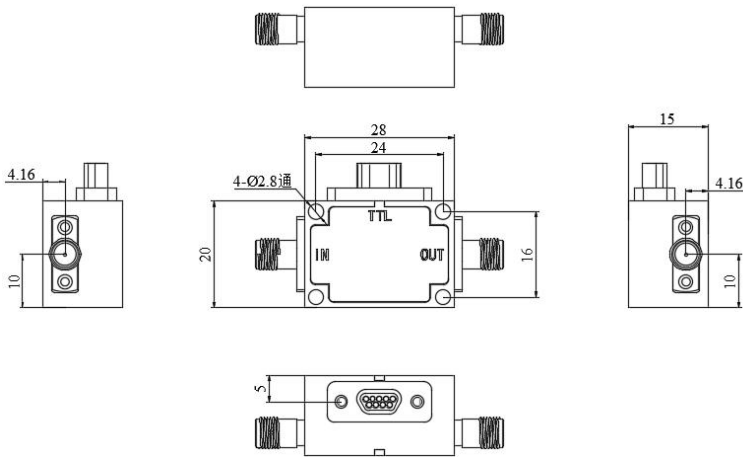
绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
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环境和机械特性 Envrionmental And Physical Characteristics:

描述 Description	参数 Parameter	单位 Units
操作温度 Operating Temerature	-55 To +125	℃
存储温度 Storage Temerature	-55 to +125	℃
材质 Material	Al	
表面处理 Finish	Gold Plated	
输入/输出接口 Input /Output Connector	2.92mm Female	
直流控制接口 DC and control interface	J30J-9ZKP	

外形图 Outline Drawing: Unit:mm



Truth Table						
TTL Control Input						Signal Path
Bit1	Bit2	Bit3	Bit4	Bit5	Bit6	State
0	0	0	0	0	0	Reference
1	0	0	0	0	0	5.625
0	1	0	0	0	0	11.25
0	0	1	0	0	0	22.5
0	0	0	1	0	0	45
0	0	0	0	1	0	90
0	0	0	0	0	1	180
1	1	1	1	1	1	354.375

Note: +3.3V~+5V is “1”; 0V is “0”

PIN	2-7	1	8	9
Function	Bit6~Bit1	+5V	GND	NC



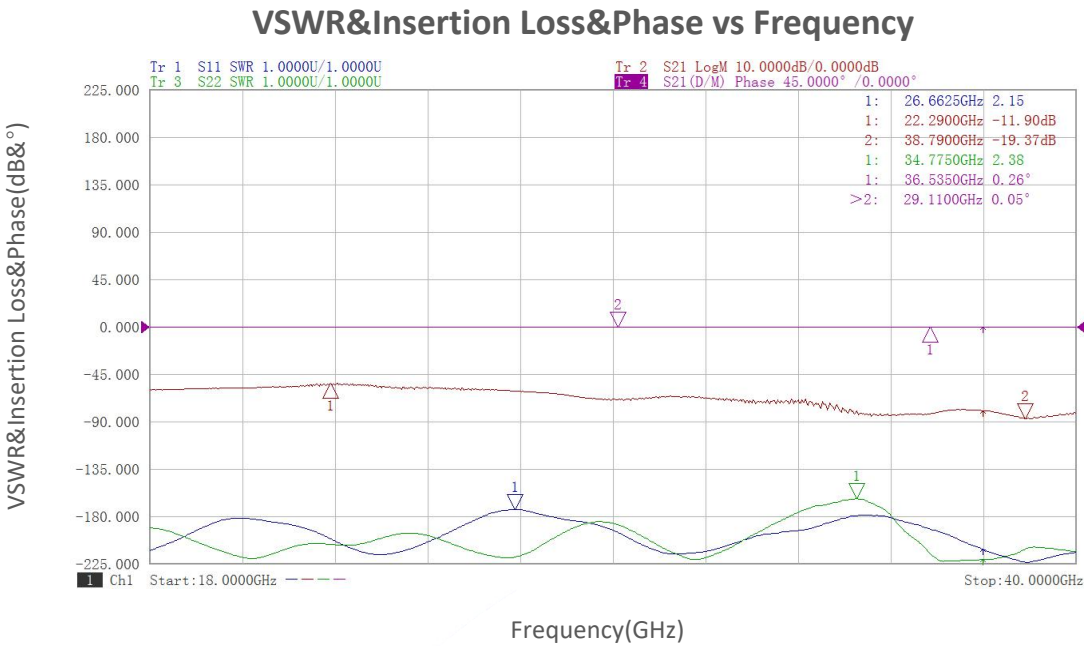
ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

订货信息 Ordering Information:

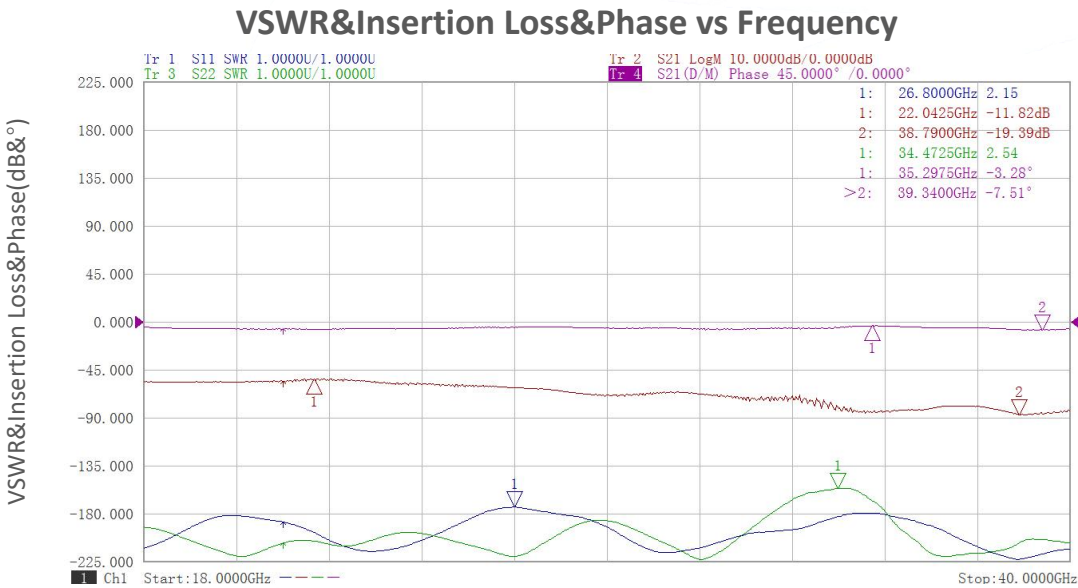
标准型号 Base Number	描述 Desciption	版本号 Revision
TURDP18G40G-3606	6-Bit Digital Phase Shifter,18-40GHz,2.92mm Female	Rev.1.1

典型曲线 Typical Performance Data:

0° :

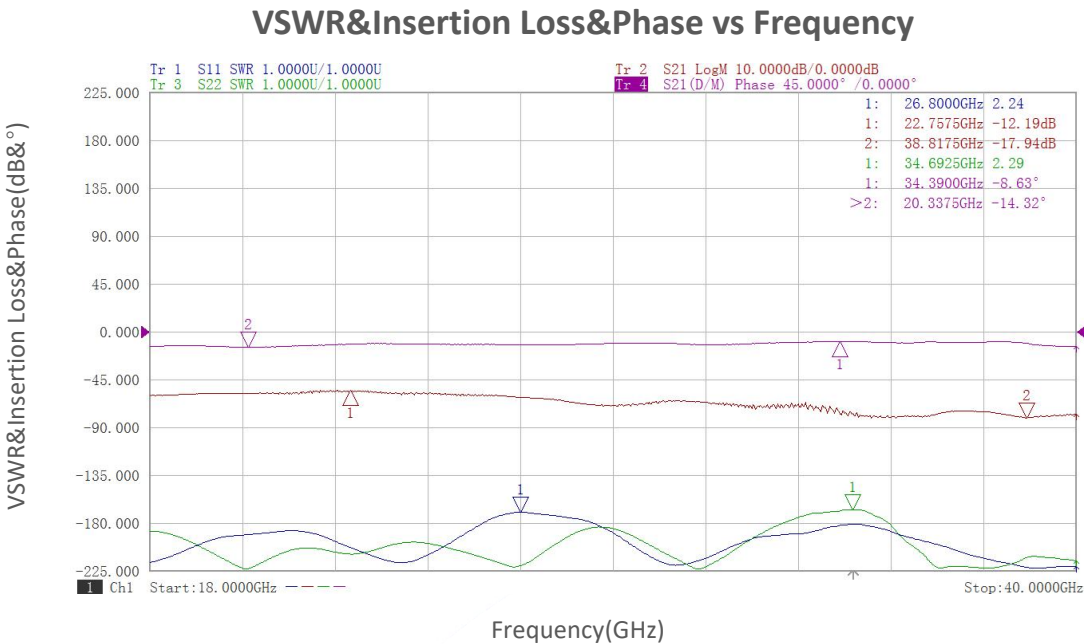


5.625° :

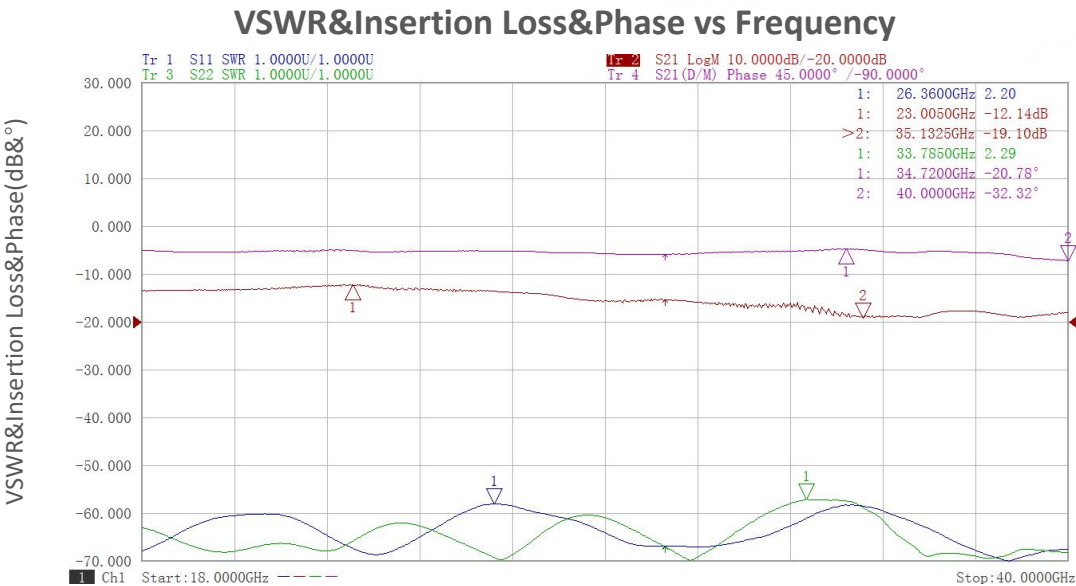


典型曲线 Typical Performance Data:

11.25° :

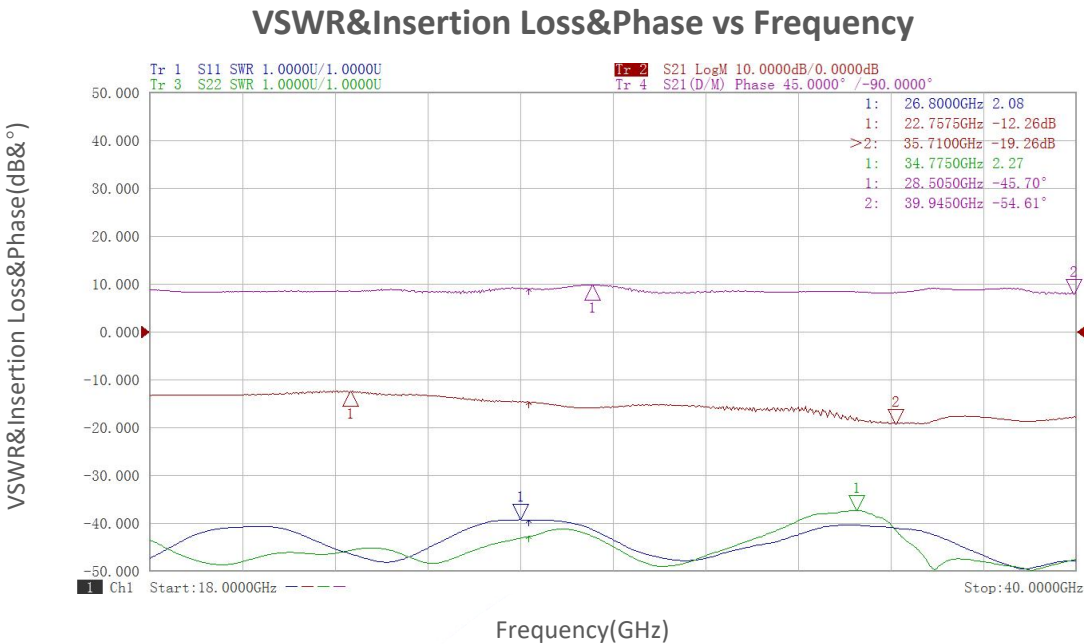


22.5° :

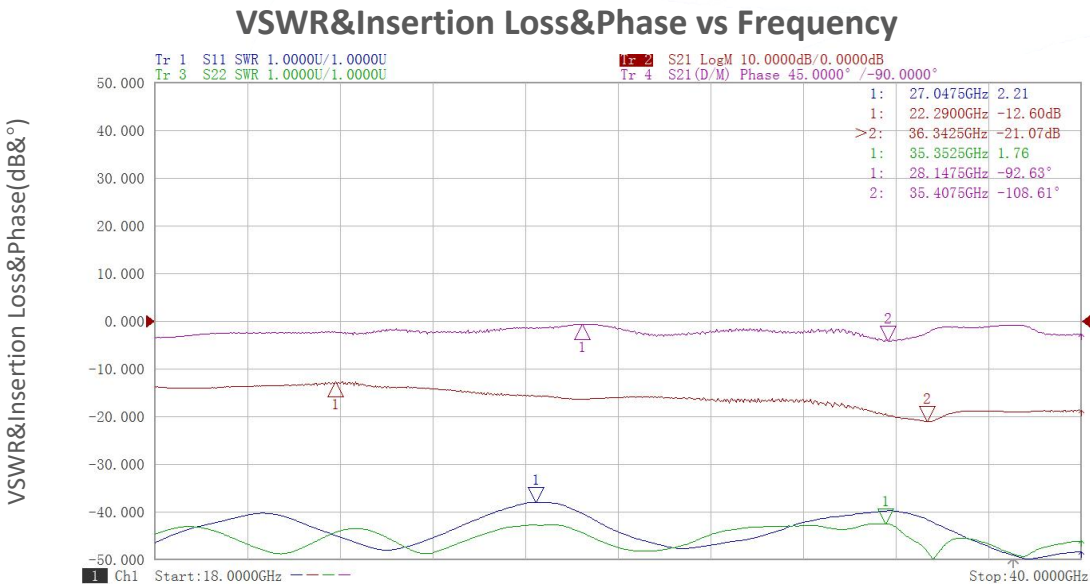


典型曲线 Typical Performance Data:

45° :

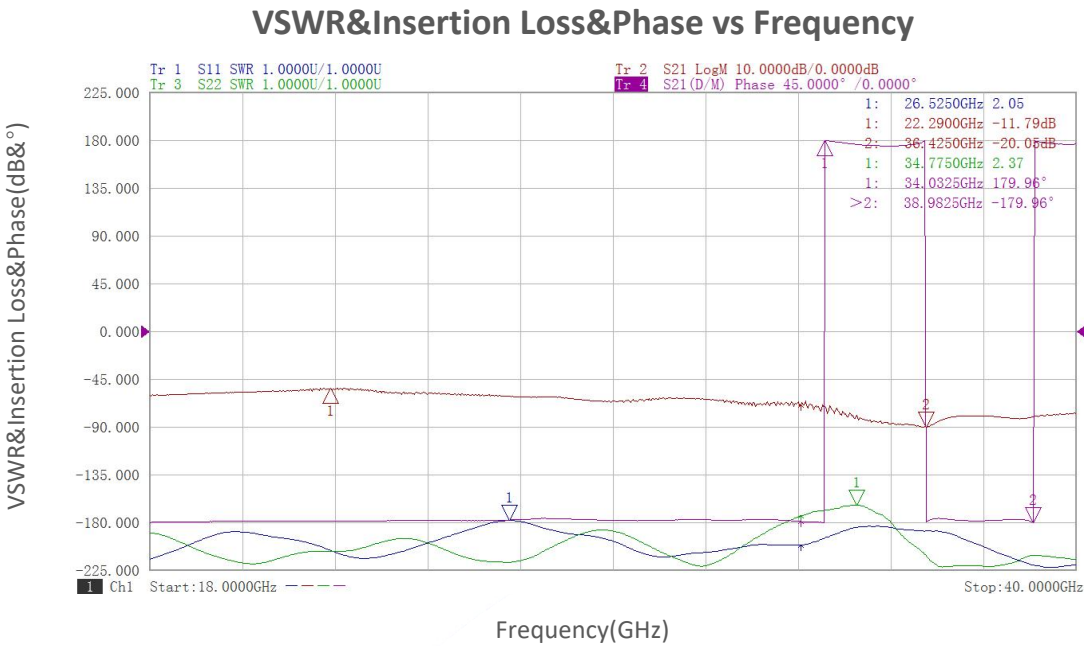


90° :



典型曲线 Typical Performance Data:

180° :



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.