

Company Introduction

Founded in 1993 in Shanghai, China, Shanghai Huaxiang Computer Communication Engineering Co., Ltd. (SHX) is one high-tech enterprise proficient in designing, manufacturing, marketing and selling RF & microwave components & Subsystems for satellite and ground communications, military, cell telephone testing, radar, microwave communication, science research, broadcast & television area etc. SHX's mission is:

- 1、Contribute to country with essential national concept.
- 2、Always do our best to satisfy our Customer.
- 3、Train people and make most fortune to promote society civilization.

SHX is a quality management system certification and four evidence of industry registered company. SHX has over eight national patents including attenuators, terminations, directional couplers and coaxial switches. SHX's directional coupler was recognized as copper medal from Shanghai government, DTS serial high power attenuators, coaxial terminations, coaxial switch and RF test system were granted as Shanghai high technology application items, high power terminations were listed into Shanghai emphasized new products.

The main products include:

1、Coaxial Attenuators:

Include 50Ω and 75Ω serial coaxial fixed attenuators, inset attenuators, low PIM attenuators, anti-pulse attenuators, variable & step attenuators, programmable attenuators etc.

2、Coaxial Terminations/Loads:

Include 50Ω and 75Ω serial coaxial fixed terminations, water loads, coaxial high power standard terminations, inset terminations, waterproof terminations, low PIM terminations etc.

3、Measurement Unit Power Aging Device

4、Mismatch Terminations

Include VSWR fixed, VSWR variable, phase variable, VSWR and phase both variable mismatch terminations.

5、Phase Shifters

6、Directional Couplers

7、Coaxial Switches

8、Microwave Power Meter

9、Coaxial Detector

10、Filter/Duplexer

11、Bias Tee

12、Power Dividers/Combiners

13、Circulators/Isolators

14、Integrated Attenuators/High Power Resistors.

15、Microwave Test Subsystem

Include 80×8, 16×3, 8×8, 8×2, 4×4, 4×2 programmable test subsystem, 8×16, 3×6, 2×4 switching matrix etc.

16、Test Accessories

Include 40GHz DC-blocks, impedance converters, feed-through terminations, kinds of 2.4mm, 2.92mm, 3.5mm adapters, test cables etc.

Enterprise standards:

DTS Serial Coaxial Attenuators: Q31/0104000058C019-2017

TF Serial Coaxial Terminations: Q31/0104000058C020-2017

SHX Serial High Power Resistors: Q31/0104000058C023-2017

Directional Couplers: Q31/0104000058C024-2017

SHX-ZJ Serial 3dB Hybrid: Q31/0104000058C022-2017

SHX Serial Phase Shifters: Q31/0104000058C011-2016

SHX Serial Coaxial Detectors: Q31/0104000058C021-2017

SHX-801 Serial Coaxial Switches: Q31/0104000058C001-2015

SHX-2462 Handy Power Meter: Q31/0104000058C004-2015

SHX-GF Power Splitters/SHX-HL Combiners: Q31/0104000058C006-2015

SHX-BT Bias Tee: Q31/0104000058C007-2015

SHX371 Serial Attenuators: Q31/0104000058C012-2016

Mismatch Terminations: Q31/0104000058C027-2017

Variable/Step Attenuators: Q31/0104000058C026-2017

Military standards:

DTS Serial Coaxial Attenuators: QJ/SGNC4-2003;

TF Serial Coaxial Terminations: QJ/SGNC5-2003;

(D)DTO Serial (Dual)Single Directional Couplers: QJ/SGNC6-2003;

SHX Serial High Power Resistors: QJ/SGNC3-2003.

We take quality and honesty as the base for company development, provide best service to meet customer's demand.

Thank you for your choosing our products!

Additional information about SHX and more new products are available at our website:

www.shx-sh.com

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DC-50GHz高频系列产品 (DC-50GHz High Frequency Series Products)

50GHz高频衰减器/负载(50GHz High Frequency Attenuator/Terminations)



- ▶ DC-50GHz, 2-20W, 2.4mm&2.92mm连接器, 标称衰减量(1-9,10,20,30,40dB)
- ▶ DC-26.5GHz, 2-50W, 3.5mm连接器, 标称衰减量(3,6,10-90dB)
- ▶ 衰减值平坦, 精度高, 低驻波比
- ▶ 可靠性高、重复性好, 见P1-7到P1-11, P2-7到P2-8
- ▶ DC-50GHz, 2-20W, 2.4mm&2.92mm connector, Standard attenuation value (1-9,10,20,30,40dB)
- ▶ DC-26.5GHz, 2-50W, 3.5mm connector, Standard attenuation value(3,6,10-90dB)
- ▶ Precision attenuation, flat frequency response and low VSWR
- ▶ High reliability and excellent repeatability. Page 1-7 to 1-11, Page 2-7 to 2-8

40GHz高频程控衰减器(40GHz High Frequency Programmable Attenuators)

- ▶ 超宽带频率0.5-40GHz, 1W, 2.92mm连接器
- ▶ 衰减量31dB/1dB或63dB/1dB步进
- ▶ TTL电平精确控制, 切换速度ns级
- ▶ 可按照客户要求设计, 见P1-52
- ▶ Ultra Wide Band Operation 0.5-40GHz, 1W, 2.92mm connector
- ▶ 1dB LSB Steps to 31dB or 63dB
- ▶ TTL Positive Control, Switching Speed ns level
- ▶ Custom Designs Available



45GHz高频定向耦合器/功分器 (45GHz High Frequency Directional Coupler/Power Dividers)



高频耦合器 High Frequency Coupler

- ▶ 覆盖带宽DC-45GHz
- ▶ 典型耦合度10dB,13dB,16dB,20dB
- ▶ 空气/微带线/带状线结构供选择
- ▶ 低损耗,可靠性高, 见P6-6
- ▶ DC-45GHz, broad bandwidth
- ▶ Typical coupling is 10dB,13dB,16dB,20dB
- ▶ Air line, microstripline, stripline structure choice
- ▶ Low loss, high reliability, Page 6-6

高频功分器 High Frequency Power Dividers

- ▶ 产品可实现2路到16路
- ▶ 频率范围 DC-45GHz
- ▶ 电抗式 (Wilkinson) 或电阻式设计
- ▶ 广泛应用于基站, PCS和UMTS领域, 见P12-4到P12-6
- ▶ Configurations available from 2-Way up to 16-Way
- ▶ Frequency range DC-45GHz
- ▶ Reactive(Wilkinson type) and resistive designs
- ▶ Power dividers support Cellular, PCS and UMTS bands
- Page 12-4 to 12-6

40GHz精密转接器/测试电缆 (40GHz Precision Adapter/Test Cable)



- ▶ DC-40GHz, 最大功率1000W
- ▶ 2.92mm, 3.5mm, SMA, N, 7 / 16, APC7, BNC, TNC等多种转接器可选
- ▶ DC-40GHz 高精度测试电缆2.92mm,3.5mm,SMA, N, 7/16可选, 见P16-6
- ▶ DC-40GHz, maximum power 1000W
- ▶ 2.92mm, 3.5mm, SMA, N, 7 / 16, APC7, BNC, TNC adapters available
- ▶ DC-40GHz test cables with 2.92mm, 3.5mm, SMA, N, 7/16 connectors, Page 16-6



俊科[®] SHX 重点产品 (Major Products)

MS20-50高压脉冲衰减器 (MS20-50 High Voltage Pulse Attenuators)

- ▶ 频率范围DC-1500MHz
- ▶ 平均功率50W, 最大峰值电压20kV
- ▶ 承受电压高, 输入接头特制作
- ▶ 可按照客户要求定制, 见P1-34
- ▶ Frequency range DC-1500MHz
- ▶ Average power 50W, Max peak voltage 20kV
- ▶ anti-high pulse voltag, special input connector
- ▶ Custom designs available, Page 1-34



500W 18GHz衰减器 (500W 18GHz Attenuators)

- ▶ DC-18GHz, 平均功率500W
- ▶ 衰减值30,40dB
- ▶ 工作频带宽, 驻波系数低, 抗脉冲, 抗烧毁能力强
- ▶ 产品符合RoHS规范
- ▶ 可按照客户要求定制, 见P1-23
- ▶ DC-18GHz, average power 500W
- ▶ Attenuation value 30,40dB
- ▶ Wide frequency band, low VSWR, anti-pulse and anti-burnout
- ▶ RoHS Compliance
- ▶ Custom designs available. Page 1-23



连续可调衰减器 (Variable Attenuators)

- ▶ 频率范围0.5-4GHz, 2-18G
- ▶ 平均功率2W, 衰减范围(0-20dB)
- ▶ 体积小、精度高、稳定可靠
- ▶ 产品符合RoHS规范
- ▶ 可按照客户要求定制
- ▶ Frequency range 0.5-4GHz, 2-18G
- ▶ Average power 2W, attenuation value(0-20dB)
- ▶ Small with high reliability and stability
- ▶ RoHS Compliance
- ▶ Custom designs available



28GHz数控移相器 (28GHz Digital Control Phase)

- ▶ 频率范围 26.5-29.5GHz
- ▶ 专为5G通信设计
- ▶ 6Bit 360°可调
- ▶ TTL电平精确控制
- ▶ 切换速度ns级
- ▶ 可按照客户要求定制, 见P5-2
- ▶ Frequency Range 26.5-29.5GHz,
- ▶ Specially Design for 5G Communication
- ▶ 6Bit 360°Adjustable
- ▶ TTL Positive Control
- ▶ Switching Speed ns level
- ▶ Custom Designs Available, Page 5-2



DC-28GHz转鼓式步进衰减器 (DC-28GHz Rotary Step Attenuators)

- ▶ DC-28GHz, 平均功率2W,10W,25W
- ▶ 衰减范围0-90dB, 10dB步进
- ▶ 体积小、精度高、稳定可靠
- ▶ 产品符合RoHS规范
- ▶ 可按照客户要求定制, 见P1-44
- ▶ DC-28GHz, average power 2W, 10W,25W
- ▶ Attenuation value 0-90dB, 10dB step
- ▶ Small with high reliability and stability
- ▶ RoHS Compliance
- ▶ Custom designs available. Page 1-44



微波功率模块-便携式功率计&功率检测模块 (Microwave Power Module - Handy Power Meter & Power Monitor Module)



便携式功率计Handy Power Meter

- ▶ 重量轻、体积小、便于携带
- ▶ 测量范围大、操作简便
- ▶ 可通过USB接口供电
- ▶ 具备自动校准和调零功能
- ▶ 显示采用液晶显示方式, 见P8-3
- ▶ Light, small and easy to carry
- ▶ Large measuring range, easy operation
- ▶ Through the USB interface power supply
- ▶ With automatic calibration and zero function
- ▶ Display using LCD display mode. Page 8-3



嵌入式功率检测模块Embedded Power Monitor Module

- ▶ 具有dBm和mW两种显示方式
- ▶ 有较强的抗电磁干扰能力
- ▶ 可同时显示多个通道的功率
- ▶ 体积小, 结构紧凑, 适宜装机
- ▶ 可靠性MTBF≥100000h, 见P8-4
- ▶ Have dBm and mW two display mode
- ▶ has strong anti electromagnetic interference ability
- ▶ Display multiple channel power at the same time
- ▶ small volume, compact structure, suitable for installation
- ▶ MTBF≥100000h. Page 8-4

DC-6GHz LTE,4G,5G系列产品 (DC-6GHz LTE,4G,5G Series Products)

大功率衰减器/负载 (High Power Attenuators/Terminations)



- ▶ DC-6GHz, 1W-500W
- ▶ 衰减平坦, 精度高, 低驻波比
- ▶ 可靠性高、重复性好
- ▶ 抗脉冲, 抗烧毁
- ▶ 产品符合RoHS规范
- ▶ 可按照客户要求定制, 见P1-24 P2-23
- ▶ DC-6GHz, 150-500W
- ▶ Flat attenuation value, high precision, low VSWR
- ▶ High reliability and repeatability
- ▶ Anti-pulse and anti-burnout
- ▶ Low IM3 versions available
- ▶ RoHS Compliance
- ▶ Custom designs available. Page 1-24 2-23

0.4-6GHz程控衰减器 (0.4-6GHz Programmable Attenuators)



- ▶ 频率范围0.4-6GHz, 最大衰减量110dB/0.25,0.5, 1dB步进
- ▶ 切换速度 ns or μ s
- ▶ 广泛应用于3G,MMDS,WLAN,WiMAX及其它无线通信系统
- ▶ 可提供压控衰减器 (VVA)
- ▶ 低驻波比,重复性好,可靠性高
- ▶ 可按照客户要求定制, 见P1-54
- ▶ Frequency range 0.4-6GHz. Attenuation maximum 110dB with 0.25,0.5,1dB steps
- ▶ Fast switching speed with ns or μ s
- ▶ 3G,MMDS,WLAN,WiMAX and other wireless communication systems
- ▶ Voltage-controlled attenuator (VVA) available
- ▶ Low VSWR, high repeatability and high reliability
- ▶ Custom designs available. Page 1-54

GKTS-A转鼓式步进衰减器 (GKTS-A Rotary Step Attenuators)



- ▶ 频率范围DC-6GHz, 功率2W,10W, 0-101dB
- ▶ 衰减量/频率范围/衰减步进可调;最小步进0.1 dB
- ▶ 旋钮式可调
- ▶ 可实现标准19英寸机柜安装或 按需定制
- ▶ 高精度,体积小,稳定可靠/开关寿命长
- ▶ 可按照客户要求定制, 见1-34
- ▶ Frequency range DC-6GHz, power 2W,10W, 0-101dB
- ▶ Wide choice of attenuation & frequency ranges & step sizes as low as 0.1dB resolution
- ▶ Rotary adjusted
- ▶ Available on 19" rack panels or in stackable bench-top boxes
- ▶ High accuracy, small size, Stable and reliable, long switching life
- ▶ custom designs available. Page 1-34

0.5-6GHz 功分器/耦合器 (0.5-6GHz Power Dividers/Coupler)



0.5-6GHz功分器 0.5-6GHz Power Dividers

- ▶ 产品可实现2路、4路、8路
- ▶ 频率范围 0.5-6GHz
- ▶ 广泛应用于基站, PCS和UMTS领域
- ▶ Configurations available from 2-Way up to 16-Way
- ▶ Frequency range DC-40GHz
- ▶ Power dividers support Cellular, PCS and UMTS bands

0.5-6GHz耦合器 0.5-6GHz Coupler

- ▶ 覆盖带宽0.5-6GHz
- ▶ 典型耦合度10dB,20dB,30dB
- ▶ 空气/微带线/带状线结构供选择
- ▶ 低损耗,可靠性高
- ▶ 0.5-6GHz, broad bandwidth
- ▶ Typical coupling is 10dB, 20dB,30dB
- ▶ Air line, microstripline, stripline structure choice
- ▶ Low loss, high reliability

低互调大功率系列产品 (Low Intermodulation High Power Series Products)

-120dBc低互调衰减器/负载 (-120dBc Low Intermodulation Attenuator/Terminations)



- ▶ 功率容量2-300W,反射互调值-120dBc
- ▶ 频率范围DC-3GHz,可靠性高、重复性好
- ▶ 可按照客户要求定制, 见1-30和2-34页
- ▶ High power capacity with 2-300W, reflection intermodulation is -120dBc
- ▶ Frequency Range DC-3GHz, high reliability and repeatability.
- ▶ Custom designs available. Page 1-30, 2-34

-150dBc低互调衰减器/负载 (-150dBc Low Intermodulation Attenuator/Terminations)

- ▶ 功率容量30-200W,反射互调值-150dBc/-160dBc
- ▶ 频率范围0.4-6GHz,可靠性高、重复性好
- ▶ 可按照客户要求定制, 见1-32和2-32页
- ▶ High power capacity with 30-200W, reflection intermodulation is -150dBc/-160dBc
- ▶ Frequency Range 0.4-6GHz, high reliability and repeatability.
- ▶ Custom designs available. Page 1-31, 2-32



低互调转接器/电缆 (Low Intermodulation Adapters/Cables)

低互调同轴电缆线具有低驻波比, 交调低, 衰减较小, 弯曲良好等特性持续且可重复测量, 电气性能稳定, 使用寿命更长, 耐用结构可抗挤压、抗扭曲并耐弯折, 相位和幅度稳定性好, 见P16-5。

Low intermodulation coaxial cable with low VSWR, low PIM, less attenuation, bend good features such as continuous and repeated measurement, electrical performance stability, long service life, durable structure can be distorted and extrusion resistance, resistance to bending, phase and amplitude stability is good. P16-5



隔直流衰减器 (Isolate DC attenuators)

- ▶ 工作频段0.1-6GHz, VSWR≤1.30
- ▶ 工作频带宽, 衰减值平坦
- ▶ 抗脉冲, 抗烧毁能力强
- ▶ 可按客户要求设计, 见1-5页
- ▶ Frequency Range 0.1-6GHz, VSWR≤1.30
- ▶ Wide frequency band, flatness attenuation value, excellent capacity
- ▶ Anti-pulse and anti-burnout
- ▶ Custom designs available, Page 1-5



屏蔽箱 (Shield Box)

- ▶ 工作频段0.8-6GHz, 隔离度≥65dB
- ▶ 吸波能力强, 阻隔能力好
- ▶ 齐全测试接口设计
- ▶ Absorbing strong, high blocking
- ▶ Complete test interface design
- ▶ Frequency Range 0.8-6GHz isolation ≥65dB



开关控制箱 (Switches Control Box)

- ▶ 频率范围DC-18GHz
- ▶ 集成一个或多个同轴开关
- ▶ 手动或程序控制
- ▶ 精度高, 操作简单
- ▶ Frequency range DC-18GHz
- ▶ Integrate one or more coaxial switches
- ▶ Mechanical or programmable to control
- ▶ High precision, easy operation



俊科 SHX 重点产品 (Major Products)



程控衰减子系统(Programmable Attenuation Subsystems)

128×4大型射频衰减开关矩阵, 输入端可连接基站天线馈口或基站发射模块, 输出端连接测试仪器的多通道无人值守自动化测试系统, 系统由大功率固定衰减器、耦合器, 开关等器件和软件组成。

- ▶ 用户排队与通道组管理功能, 软件控制显示清晰, 操作简单
- ▶ 多用户监控, 过温告警, 开关状态告警, 风扇温度状态显示
- ▶ 多通道衰减矩阵链路控制、多通道时钟开关矩阵链路控制
- ▶ 快速自动校准, 自动测试, 校准数据管理功能

In 128×4 large RF attenuation switch matrix input port connect base station antenna feedback or base station launch module, output port connect multichannel unmanned automation test system of measurement instrument. The system consists of high-power fixed attenuator, couplers and coaxial switch and software.

- ▶ Users queue and channel group management. Software control display is clear, simple operation
- ▶ Multi-user monitoring, temperature alarm, switch state warning instructions, fan temperature status display
- ▶ Multichannel damping matrix link control, Multichannel clock switch matrix link control
- ▶ Fast automatic calibration, automatic testing, calibration data management

8-8 8×8 程控测试子系统

8-8 8×8 Programmable Test Subsystems

- ▶ 频率范围0.6-6GHz, 可本地控制和远程控制
- ▶ 衰减范围0-110dB, 最小0.5dB步进。
- ▶ 体积小, 精度高, 稳定可靠
- ▶ Frequency range 0.6-6GHz, local or remote control
- ▶ Attenuation value 0-110dB, 0.5dB step
- ▶ It is small with high accuracy and high stability



16×16 程控测试子系统

16×16 Programmable Test Subsystems

- ▶ 频率范围0.6-3GHz, 可本地控制和远程控制
- ▶ 衰减范围0-95dB, 最小0.5dB步进。
- ▶ 体积小, 精度高, 稳定可靠
- ▶ Frequency range 0.6-6GHz, local or remote control
- ▶ Attenuation value 0-110dB, 0.5dB step
- ▶ It is small with high accuracy and high stability



智能控制相位回波损耗系统(Intelligent Control Phase&Return Loss System)

电控相位驻波比可调负载在射频系统中通过精密电机控制, 同时调节相位和驻波比, 来模拟天线或终端系统的特定反射情况。SHX-CKBPSGTSF-150-700/3800-NK电控相位驻波比可调负载平均功率150W, 频率范围700-3800MHz, 回波损耗3.5-14dB(对应VSWR 1.5-5), 相位0-360°连续可调。

Electronically controlled phase VSWR adjustable mismatched load is controlled by a precision motor in the RF system. The phase and VSWR are adjusted simultaneously to simulate the specific reflection of the antenna or terminal system.

SHX-CKBPSGTSF-150-700/3800-NK electronic phase VSWR adjustable mismatch load average power is 150W, frequency range 700-3800MHz, return loss 3.5-14 dB (corresponding to VSWR 1.5-5), 0-360° phase is adjustable.



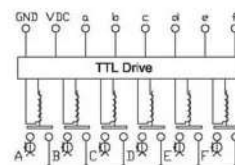
程控开关老化测试仪(Program Control Switch Aging Tester)

- ▶ SHX-989-1×8 程控开关老化测试仪主要用于开关的老化测试
- ▶ 测试仪前面板可接DB15或DB9接口
- ▶ 适用于12V, 24V, 28V各类开关, 可反馈开关状态, 见P7-18
- ▶ SHX-989-1×8 is mainly used for aging test of the switch
- ▶ The front panel of the tester can meet DB15 or DB9 interface
- ▶ Suitable for 12V, 24V, 28V switches, can feedback switch state, Page 7-18

单通道矩阵开关(Single Channel Matrix Switch)

单通道矩阵开关频率DC-8G, 它能实现任意端口间的切换, 可以替代原来两个同轴开关COM端互连实现的功能, 体积小, 可靠性高, 插入损耗低。优化系统装配通道结构。见P7-15

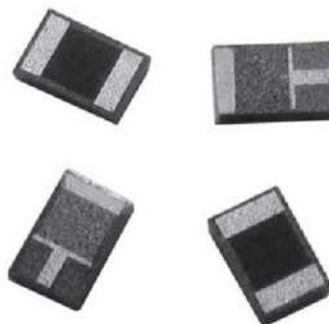
Single channel Matrix switch frequency is DC-8G. It can realize switching between any port, It is small with high stability and low insertion loss. Optimize channel structure of the systematic device assembly. Page 7-15



俊科[®] SHX 重点产品 (Major Products)

DC-28GHz金刚石贴片电阻及负载 (DC-28GHz Diamond Chip Resistor & Terminations)

- ▶ DC-28G, 10W-300W, 低驻波比
- ▶ 阻值精度 50Ω or 100Ω ±2%
- ▶ 工作温度 -50 to +150°C
- ▶ 基片材质为金刚石
- ▶ 电极材质为薄膜, 可焊金
- ▶ RoHS符合, 见P14-10
- ▶ DC-28G, 10W-300W, low VSWR
- ▶ Resistive tolerance 50Ω or 100Ω ±2%
- ▶ Operating temp range -50 to +150°C
- ▶ Substrate material is diamond
- ▶ Terminal material with thin film, gold solderable
- ▶ RoHS Compliant. Page 14-10



DC-18GHz AIN系列高功率电阻 (DC-18GHz AIN Series High Power Resistors)



- ▶ DC-18G, 10W-800W
- ▶ 阻值精度 50Ω standard ± 2%
- ▶ 工作温度 -55 to +150°C
- ▶ 基片材质为BeO, AIN
- ▶ 低驻波比、抗脉冲、抗烧毁能力强
- ▶ RoHS符合, 见P14-7
- ▶ DC-18G, 10W-800W,
- ▶ Resistive tolerance 50Ω or 100Ω ±2%
- ▶ Operating temp range -55 to +150°C
- ▶ Substrate material is BeO, AIN
- ▶ low VSWR, excellent capacity in anti-pulse and anti-burnout
- ▶ RoHS Compliant. Page 14-7

脉冲衰减器/负载系列产品 (Pulse Attenuators/Terminations Series Products)

脉冲衰减器/负载 (Pulse Attenuators/Terminations)



- ▶ DC-6GHz, 100-1000W, N&7/16连接器, 标称衰减量 (3,6,10,20,30,40,50dB)
- ▶ 衰减平坦, 精度高, 低驻波比
- ▶ 可靠性高、重复性好,
- ▶ 抗脉冲, 抗烧毁能力强见P1-5到P1-6, P2-21到P2-22
- ▶ DC-6GHz, 100-1000W, N&7/16 connector, Standard attenuation value(3,6,10,20,30,40,50dB)
- ▶ Precision attenuation, flat frequency response and low VSWR
- ▶ High reliability and excellent repeatability.
- ▶ Anti-pulse and anti-burnout. Page 1-5 to 1-6, Page 2-21 to 2-22

内置式脉冲衰减器/负载 (Inset Pulse Attenuators/Terminations)



- ▶ DC-6GHz, 100-500W, N&7/16连接器, 标称衰减量 (3,6,10,20,30,40,50dB)
- ▶ 衰减平坦, 精度高, 低驻波比
- ▶ 可靠性高、重复性好,
- ▶ 抗脉冲, 抗烧毁能力强见P1-31, P2-30
- ▶ DC-6GHz, 100-500W, N&7/16 connector, Standard attenuation value(3,6,10,20,30,40,50dB)
- ▶ Precision attenuation, flat frequency response and low VSWR
- ▶ High reliability and excellent repeatability.
- ▶ Anti-pulse and anti-burnout. Page 1-31, Page 2-30

俊科[®] SHX 同轴固定衰减器 (Coaxial Fixed Attenuators) 50 ohm

一、产品描述(Product Description)

同轴固定衰减器可定量吸收传输线中的能量, 扩展功率量程, 控制功率电平, 并可配以小功率计, 综合测试仪或频谱分析仪精确测量各种射频微波发射机的功率或频谱。

DTS系列同轴固定衰减器具有如下特征: 工作频带宽, 驻波系数低, 衰减平坦, 抗脉冲, 抗烧毁能力强。

Coaxial fixed attenuators are used in absorbing energy of transmission line, expanding power range and controlling power level, they are also used in accurately measuring power or spectrum of RF microwave transmitters accompany with small power meter, comprehensive tester or spectrum analyzer.

DTS serial coaxial fixed attenuators feature wide frequency band, low VSWR, flatness attenuation value, excellent capacity in anti-pulse and anti-burnout etc.

二、产品型号说明(Model Number Note)

TNC-平均功率2-150W, 频率范围DC-18GHz (TNC-Average power 2-150W, frequency range DC-18GHz)

SMA-平均功率1-100W, 频率范围DC-26.5GHz (SMA-Average power 1-100W, frequency range DC-26.5GHz)

TS-平均功率2W-50W, 频率范围DC-40GHz (TS-Average power 2W-50W, frequency range DC-40GHz)

DTS-大功率同轴衰减器, 平均功率10W-10KW, 频率范围DC-18GHz (DTS-High power coaxial attenuators with average power 10W-10KW, frequency range DC-18GHz)

DTS-LIM-低互调衰减器, 平均功率2W-200W, 互调值-120dBc 到 -160dBc, 频率范围DC-4GHz (DTS-LIM-Low PIM attenuators with average power 2W-200W and PIM from -120dBc to -160dBc)

WDTS-宽带大功率同轴衰减器, 平均功率50-1000W, 频率范围DC-10GHz (WDTS-Broadband high power coaxial attenuators with average power 50W-1000W, frequency range DC-10GHz)

PDTS-脉冲大功率同轴衰减器, 平均功率100-1000W, 频率范围DC-6GHz (PDTS-Pulse high power coaxial attenuators with average power 100W-1000W, frequency range DC-6GHz)

GZL-DTS-同轴隔离衰减器, 平均功率2-100W, 频率范围0.1-6GHz (GZL-DTS-Coaxial fixed isolate DC attenuators with average power 2-100W, frequency range 0.1-6GHz)

GDTS-干式大功率同轴衰减器, 平均功率1-2kW, 频率范围DC-3GHz (GDTS-Dry high power coaxial attenuators with average power 1-2kW, frequency range DC-3GHz)

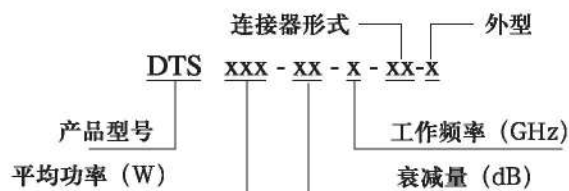
NDTS-内置式衰减器, 平均功率50-300W, 频率范围DC-26.5GHz (NDTS-Inset attenuators with average power 50-300W, frequency range DC-26.5GHz)

WNDS-宽带内置式衰减器, 平均功率50-300W, 频率范围DC-10GHz (WNDS-inset pulse attenuators with average power 50-300W, frequency range DC-10GHz)

PNDTS-内置式脉冲衰减器, 平均功率100-500W, 频率范围DC-6GHz (PNDTS-Broadband inset attenuators with average power 100-500W, frequency range DC-6GHz)

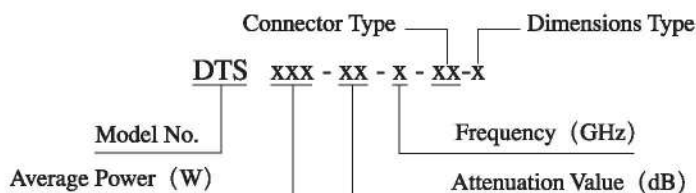
MS-抗脉冲衰减器, 脉冲电压8-20kV, 频率范围DC-2GHz (MS-Anti-pulse attenuators with pulse voltage 8-20kV, frequency range DC-2GHz)

三、订货说明 Order Information



举例:

DTS 50-30-4-N(J,K)-A表示DTS型同轴固定衰减器, 平均功率50W, 衰减30dB, 工作频率4GHz, 连接器为N(J,K)型, 外型为A型。



Example:

DTS 50-30-4-N(J,K)-A means DTS coaxial fixed attenuator with average power 50W, attenuation value 30dB, frequency range 4GHz, connector type N(J,K) and dimensions type A.

俊科[®] SHX 同轴固定衰减器 (Coaxial Fixed Attenuators) 50 ohm

四、产品规格 Product Reference Guide

型号 Model Number	平均功率 Average Power(W)	峰值功率 Peak Power(kW)	频率范围 Frequency Range(GHz)	最大驻波比 Max VSWR	标称衰减值 Nominal Attenuation Value(dB)	连接器形式 Connector Type	页码 Page
GZL-DTS10	10	1	0.1-6	1.30	1-9,10,20,30,40	N	1-5
GZL-DTS25	25	1	0.1-6	1.30	1-9,10,20,30,40	N	1-5
GZL-DTS50G	50	5	0.1-6	1.30	3,6,10,20,30,40	N	1-5
GZL-DTS100-D	100	5	0.1-4	1.25	20,30,40	N	1-5
PDTS100	100	10	DC-6	1.10-1.25	20,30,40	N	1-5
PDTS150	150	10	DC-6	1.10-1.20	20,30,40,50	N	1-5
PDTS250	250	10	DC-6	1.10-1.20	3,6,10,20,30,40-50	N	1-6
PDTS300	300	10	DC-6	1.10-1.20	20,30,40	N	1-6
PDTS400	400	10	DC-6	1.15-1.25	20,30,40,50	N	1-6
PDTS500	500	10	DC-6	1.10-1.20	30,40,50	N	1-6
PDTS1000	1000	10	DC-6	1.40	50	N	1-6
2.4TS2-50	2	0.2	DC-50	1.45	1-10,20,30	2.4mm	1-7
2.4TS5-50	5	0.2	DC-50	1.45	1-10,20,30	2.4mm	1-7
2.4TS2	2	0.2	DC-40	1.35	1,2-9,10,20,30	2.4mm	1-7
2.4TS5	5	0.2	DC-40	1.25-1.40	1-9,10,20,30,40	2.4mm	1-7
2.4TS10	10	0.2	DC-40	1.25-1.40	10,20,30,40	2.4mm	1-7
2.4TS20	20	0.2	DC-40	1.30-1.40	10,20,30,40	2.4mm	1-7
2.92TS2-26.5	2	0.2	DC-26.5	1.25	1-9,10-19,20-30,40	2.92mm	1-8
2.92TS1-40	1	0.2	DC-40	1.20	1,2-9,10,20,30	2.92mm	1-8
2.92TS2-40	2	0.2	DC-40	1.30-1.40	1-9,10-19,20-30,40	2.92mm	1-8
2.92TS5-26.5	5	0.2	DC-26.5	1.25	1-9,10-19,20-30,40	2.92mm	1-8
2.92TS5-40	5	0.2	DC-40	1.30-1.40	1-9,10-19,20-30,40	2.92mm	1-8
2.92TS10	10	0.2	DC-40	1.25-1.40	10,20,30,40	2.92mm	1-9
2.92TS20	20	0.2	DC-40	1.30-1.40	10,20,30,40	2.92mm	1-9
2.92TS30	30	0.2	DC-40	1.30-1.50	30,40	2.92mm	1-9
2.92TS50(-B)	50	0.2	DC-40	1.60	20,30,40	2.92mm	1-9
2.92TS100	100	0.5	DC-32	1.25-1.40	10,20,30,40	2.92mm	1-9
3.5TS2	2	0.5	DC-26.5	1.15-1.25	1-9,10-19,20-30,40,50,60,70	3.5mm	1-10
3.5TS5	5	0.5	DC-26.5	1.15-1.25	1-9,10-19,20-30,40,50,60	3.5mm	1-10
3.5TS10	10	0.5	DC-26.5	1.15-1.25	1-10,20,30,40,50,60	3.5mm	1-10
3.5TS25	25	0.5	DC-26.5	1.20-1.30	3,6,10,20,30,40,50,60	3.5mm	1-10
3.5TS50	50	0.5	DC-26.5	1.20-1.30	3,6,10,20,30,40,50,60	3.5mm	1-10
3.5TS100-26.5	100	0.5	DC-26.5	1.20-1.40	3,6,10,20,30,40,50	SMA,3.5mm,2.92mm,N,TNC	1-11
MSMA	2	0.5	DC-18	1.30	1-9,10,20,30	SMA(M,F)	1-11
SMAS	2	0.5	DC-26.5	1.15-1.30	1-8,9-12	SMA(M,F)	1-11
SMA	2	0.5	DC-18	1.15-1.35	1-9,10,20,30	SMA(M,F)	1-11
SMAG	2	0.5	DC-18	1.15-1.30	1-9,10,20,30,40,50	SMA(M,F)	1-11
SMAG2	2	0.5	DC-26.5	1.15-1.35	1-9,10,20,30,40	SMA(M,F)	1-11
SMAGH	2	0.5	DC-26.5	1.25-1.40	30,40,50,60,70,80,90	SMA	1-11
SSMA	2	0.2	DC-18	1.25-1.35	1-9,10,20,30	SSMA	1-12
RPSMA	2	0.5	DC-6	1.15-1.20	1-9,10,20,30	RPSMA	1-12
QMA2	2	0.5	DC-6	1.15-1.20	1-9,10,20,30	QSMA-SMA	1-12
QMA2	2	0.5	DC-6	1.15-1.20	1-9,10,20,30	QSMA-SMA	1-12
SMAKF	2	0.5	DC-26.5	1.15-1.35	1-9,10,20,30	SMA(K,K)	1-12
SMA5	5	0.5	DC-26.5	1.15-1.35	3,6,10,20,30,40,50	SMA(M,F)	1-12
QSMA10	10	0.5	DC-6	1.20	30	QSMA(M)-SMA(F)	1-12
SMA10	10	1	DC-26.5	1.15-1.35	3,6,10,20,30,40	2.92mm,SMA	1-12
SMA25	25	1	DC-26.5	1.20-1.35	10,20,30,40	2.92mm,SMA	1-13
DTS50GA	50	1	DC-26.5	1.20-1.30	10,20,30,40,50,60	SMA,3.5mm,2.92mm	1-13
SMK50-26.5	50	1	DC-32	1.25-1.35	10,20,30,40	2.92mm	1-13
TS2	2	0.5	DC-6	1.10-1.30	1-9,10,20,30,40	N,SMA,TNC,BNC	1-13
TS2G	2	0.5	DC-18	1.20-1.40	1-9,10,20,30,40,50	N,TNC,SMA	1-14
TS2GA	2	0.5	DC-18	1.20-1.30	1-9,10,20,30,40,50	N,TNC	1-14
TS2GH	2	0.5	DC-18	1.20-1.35	40,50,60,70,80,90	N,TNC	1-14
TS5	5	0.5	DC-6	1.10-1.30	1-9,10,20,30,40	N,SMA,TNC,BNC	1-14
TS5G	5	0.5	DC-18	1.20-1.40	1-9,10,20,30,40,50	N,TNC,SMA	1-14
TS5GA	5	0.5	DC-18	1.20-1.30	1-9,10,20,30,40,50	N,TNC	1-14
TS5GH	5	0.5	DC-18	1.20-1.35	40,50,60,70,80,90	N,TNC	1-14