

DC to 65 GHz HV Coaxial Connector Plug Terminations

HV-TM Series



Overview

Low V.S.W.R. in the extremely high frequency band and lightweight, supporting the next generation of even higher signal speeds.

A suspended substrate line is used to achieve the extremely high bandwidth and our unique design of the interior components removes coupling stress, while maintaining high reliability.

Features

1. Low V.S.W.R.

1.15 (Typical DC to 50 GHz)

1.35 (Typical 50 to 65 GHz)

2. Space-saving design

Overall dimensions of only 9 mm dia. x 18.3 mm long

3. Lightweight

Total weight of only 5.5 g.

4. Usable over an extremely wide bandwidth

Usable over an extremely wide bandwidth of frequencies: DC to 65 GHz.

5. Mating compatibility

Will mate with corresponding V Connector™. (Note)

6. Environmental considerations

Soldering compounds are lead-free.

Applications

* Optical transmission devices

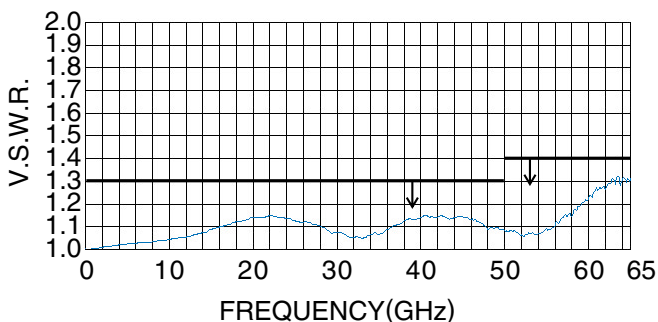
* Network analyzers

* BERTS (Bit Error Ratio Testing Systems)

* FWA (Fixed Wireless Access)

and for measurement purposes in other applications requiring frequencies of up to 65 GHz.

High Frequency Characteristics (Typical)



Note: V Connectors is a registered trademark of Anritsu Corporation.

Product Specifications

Rating	Frequency range	DC to 65GHz	Operating temperature range	-10°C to +65°C
	Characteristic impedance	50 ohms		
	Power	0.5W (At 65°C)	Operating relative humidity	90% max.
	V.S.W.R.	1.3 max. (DC to 50GHz) 1.4 max. (50 to 65GHz)		

Item	Specification	Conditions
1.Direct current resistance	50 ohms $\pm$ 4% max.	1V DC
2.Vibration	No damage, cracks, or parts dislocation.	Frequency 10 to 55 Hz, single amplitude of 1.5mm, 3 axis, duration of 2 hours.
3.Shock	No damage, cracks, or parts dislocation.	Acceleration of 490m/s ² , sine half-wave waveform, 3 cycles in each of the 3 axis.
4.Temperature cycle	No damage, cracks, or parts dislocation.	Temperature: -55°C→15°C to 25°C→125°C→15°C to 25°C Duration (minutes): 30→2 to 3→30→2 to 3 100 cycles
5.High temperature exposure	No damage, cracks, or parts dislocation.	48 hours at 125°C
6.Low temperature exposure	No damage, cracks, or parts dislocation.	48 hours at -55°C
7.Corrosion resistance	No corrosion	5% salt water solution, 48 hours at 35°C

Materials and Finishes

Components	Material	Finish
Shell	Stainless steel	Passivated
Insulator	PTFE (Polytetrafluoroethylene)	—
Male contact	Brass	Gold plated
Coupling	Stainless steel	Passivated
Attenuation element	Metal film	—

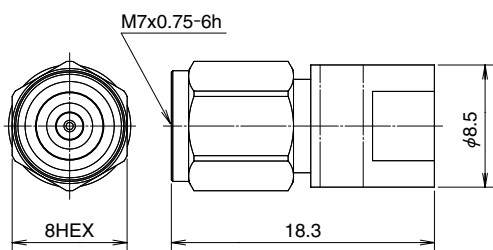
Ordering information

HV - TM P

① ② ③

① Series name	: HV Series
② TM	: Non-reflective terminator
③ Connector type	P:Plug

Plug Type Terminator



Part number	CL No.
HV-TMP	CL 353-0146-6

Precautions

The center pin contact has the diameter of 0.511 mm. Exercise due care when handling the terminator. When mating the terminator with the corresponding connector rotate the hex part only. Do not apply axial loads to the center contact or the terminator body.



HIROSE ELECTRIC CO.,LTD.

5-23,OSAKI 5-CHOME,SHINAGAWA-KU,TOKYO 141-8587,JAPAN
PHONE: 81-3-3491-9741, FAX: 81-3-3493-2933
<http://www.hirose.com>
<http://www.hirose-connectors.com>