



ISO 9001 Certified

LP-GTV-N Series

- *DC Pass Multi-Strike Design*
- *Broadband Bidirectional Design*
- *Excellent IL/RL Performance Over the Entire Operating Frequency Band*
- *Fully Weatherized Housing*
- *White Bronze Plated for Durability and Long Life*



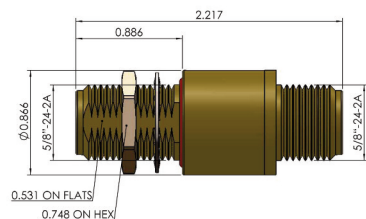
Lightning and Surge Protection for The 21st Century™

The **Times-Protect®** LP-GTV-N series is an exceptional broadband DC pass design for lightning protection applications requiring DC power to be supplied to the electronics. These devices exhibit outstanding RF performance with high surge current handling characteristics and cover a broad range of applications requiring up to 150W of RF power handling. Its fully weatherized housing meeting IP67 standard allows for outdoor as well as indoor installation. The N connector designs cover the entire frequency spectrum from DC through 7000MHz.

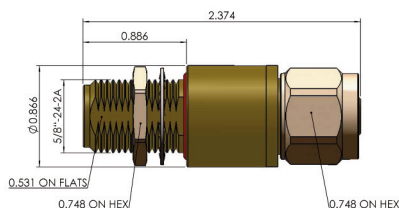
LP-GTV-N Series:

- LP-GTV-NFF (150W)
N Female connectors on both sides - bidirectional
- LP-GTV-NFM (150W)
N Male connector on one side & N Female connector on the other side - bidirectional

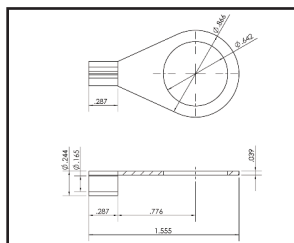




- LP-GTV-NFF
DC Pass N Type F/F

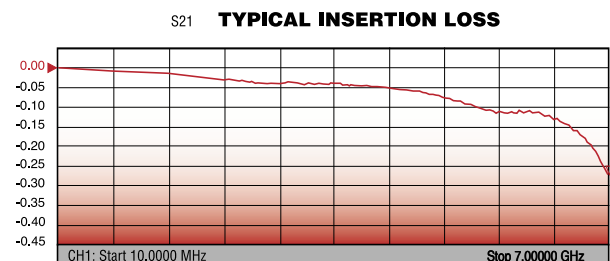
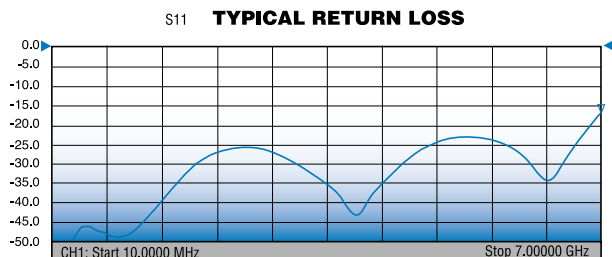


- LP-GTV-NFM
DC Pass N Type F/M



- Grounding Ring

*All Dimensions shown in inches



Electrical Specifications		
Impedance	50 Ω	
Frequency Range	DC-7000 MHz	
VSWR/Return Loss	< 1.2:1 / <-20dB (DC-6700MHz) < 1.3:1 / <-17dB (6700-7000MHz)	
Insertion Loss	< 0.2dB (DC-6700MHz) < 0.3dB (6700-7000Mhz)	
Maximum Surge Current	10kA multiple (8x20μs wave-form)	
Impulse Sparkover	700V (1kV/μs)	
Turn on	180Vdc	
Average Power	150 Watts	
Protection Circuit	DC Pass	
Mechanical / Environmental Specifications		
Temp Range Storage/Operating	-40°C - +85°C	
Weatherization	IEC 60068 40/085/21 & IP67	
Thermal Shock	US MIL-STD 202, Meth.107,Cond.B	
Vibration	US MIL-STD 202, Meth.204,Cond.B	
Shock	US MIL-STD 202, Meth.213,Cond.I	
RoHS Compliant	Yes	
Wear/Mating Cycles	500 minimum	
Recommended Coupling Nut Torque	7 to 10 lb-in	
Unit Weight	1.41 oz / 40 grams	
Material Specifications		
Component	Material	Plating
Body	Aluminum	White Bronze
Inner Conductor Male	Brass	Silver
Inner Conductor	Phosphor Bronze	Silver
Washer	Brass	White Bronze
Coupling Nut	Brass	White Bronze
Insulator	PTFE	--
O-Ring	Silicone Rubber	--



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LP-GTV-S Series

- *DC Pass Multi-Strike Design*
- *Broadband Bidirectional Design*
- *Excellent IL/RL Performance Over the Entire Operating Frequency Band*
- *Fully Weatherized Housing*
- *White Bronze Plated for Durability and Long Life*



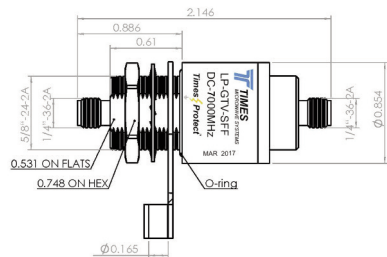
Lightning and Surge Protection for The 21st Century™

The **Times-Protect®** LP-GTV-S series is an exceptional broadband DC pass design for lightning protection applications requiring DC power to be supplied to the electronics. These devices exhibit outstanding RF performance with high surge current handling characteristics and cover a broad range of applications requiring up to 150W of RF power handling. Its fully weatherized housing meeting IP67 standard allows for outdoor as well as indoor installation. The SMA connector designs cover the entire frequency spectrum from DC through 7000MHz.

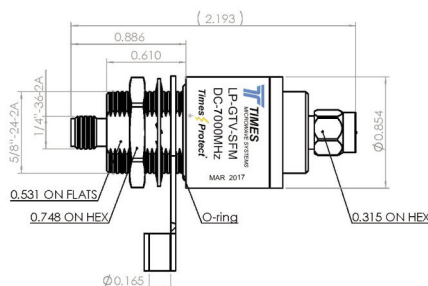
LP-GTV-S Series:

- LP-GTV-SFF (150W)
SMA Female connectors on both sides - bidirectional
- LP-GTV-SFM (150W)
SMA Male connector on one side & SMA Female connector on the other side - bidirectional

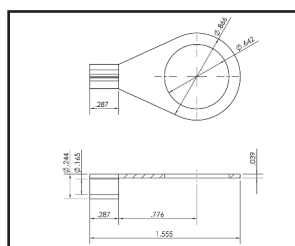




- LP-GTV-SFF
DC Pass SMA Type F/F

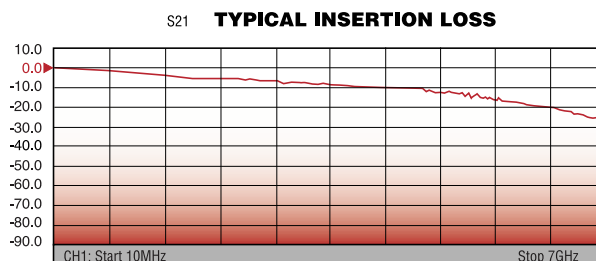
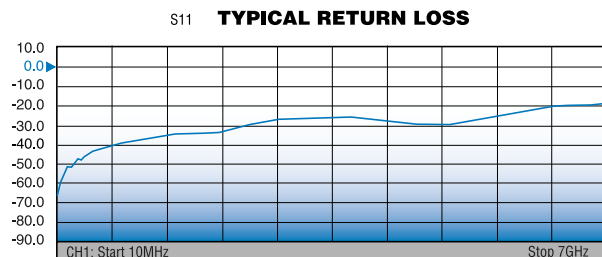


- LP-GTV-SFM
DC Pass SMA Type F/M



- Grounding Ring

*All Dimensions shown in inches



Electrical Specifications

Impedance	50 Ω
Frequency Range	DC-7000 MHz
VSWR/Return Loss	< 1.2:1 / <-20dB (DC-6700MHz) < 1.3:1 / <-17dB (6700-7000MHz)
Insertion Loss	< 0.2dB (DC-6700MHz) < 0.3dB (6700-7000Mhz)
Maximum Surge Current	10kA multiple (8x20μs wave-form)
Impulse Sparkover	700V (1kV/μs)
Turn on	180Vdc
Average Power	150 Watts
Protection Circuit	DC Pass

Mechanical / Environmental Specifications

Temp Range Storage/Operating	-40°C - +85°C
Weatherization	IEC 60068 40/085/21 & IP67
Thermal Shock	US MIL-STD 202, Meth.107,Cond.B
Vibration	US MIL-STD 202, Meth.204,Cond.B
Shock	US MIL-STD 202, Meth.213,Cond.I
RoHS Compliant	Yes
Wear/Mating Cycles	500 minimum
Recommended Coupling Nut Torque	3 to 5 lb-in
Unit Weight	1.41 oz / 40 grams

Material Specifications

Component	Material	Plating
Body	Aluminum	White Bronze
Inner Conductor Male	Brass	Silver
Inner Conductor	Phosphor Bronze	Silver
Washer	Brass	White Bronze
Coupling Nut	Brass	White Bronze
Insulator	PTFE	--
O-Ring	Silicone Rubber	--



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LP-GTVS 04/17



ISO 9001 Certified

LP-GTV-T Series

- DC Pass Multi-Strike Design
- Broadband Bidirectional Design
- Excellent IL/RL Performance Over the Entire Operating Frequency Band
- Fully Weatherized Housing
- White Bronze Plated for Durability and Long Life



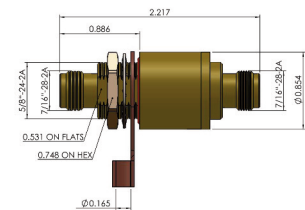
Lightning and Surge Protection for The 21st Century™

The **Times-Protect®** LP-GTV-T series is an exceptional broadband DC pass design for lightning protection applications requiring DC power to be supplied to the electronics. These devices exhibit outstanding RF performance with high surge current handling characteristics and cover a broad range of applications requiring up to 150W of RF power handling. Its fully weatherized housing meeting IP67 standard allows for outdoor as well as indoor installation. The TNC connector designs cover the entire frequency spectrum from DC through 6000MHz.

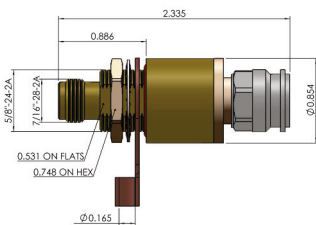
LP-GTV-T Series:

- LP-GTV-TFF (150W)
TNC Female connectors on both sides - bidirectional
- LP-GTV-TFM (150W)
TNC Female connector on one side & TNC Male connector on the other side - bidirectional
- LP-GTV-RTFF (150W)
R-TNC Female connectors on both sides - bidirectional
- LP-GTV-RTFM (150W)
R-TNC Female connector on one side & R-TNC Male connector on the other side - bidirectional

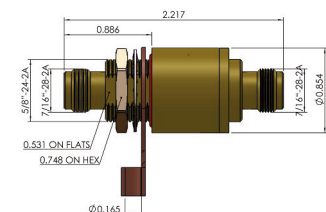




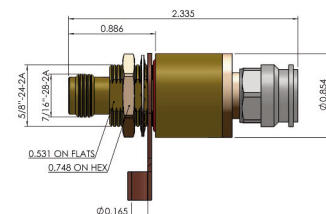
- LP-GTV-TFF
DC Pass TNC Type F/F



- LP-GTV-TFM
DC Pass TNC Type F/M



- LP-GTV-RTFF
DC Pass RTNC Type F/F



- LP-GTV-RTFM
DC Pass RTNC Type F/M

Electrical Specifications

Impedance	50 Ω
Frequency Range	DC-6000 MHz
VSWR/Return Loss	< 1.3:1 / < -18dB (DC-6000MHz)
Insertion Loss	< 0.15dB (DC-6000MHz)
Maximum Surge Current	10kA multiple (8x20 μ s wave-form)
Impulse Sparkover	700V (1kV/ μ s)
Turn on	180Vdc
Average Power	150 Watts
Protection Circuit	DC Pass

Mechanical / Environmental Specifications

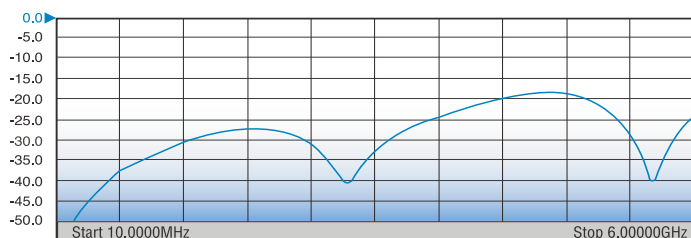
Temp Range Storage/Operating	-40°C - +85°C
Weatherization	IEC 60068 40/085/21 & IP67
Thermal Shock	US MIL-STD 202, Meth.107,Cond.B
Vibration	US MIL-STD 202, Meth.204,Cond.B
Shock	US MIL-STD 202, Meth.213,Cond.I
RoHS Compliant	Yes
Wear/Mating Cycles	500 minimum
Recommended Coupling Nut Torque	4 - 6 in-lbs
Unit Weight	1.41 oz / 40 grams

Material Specifications

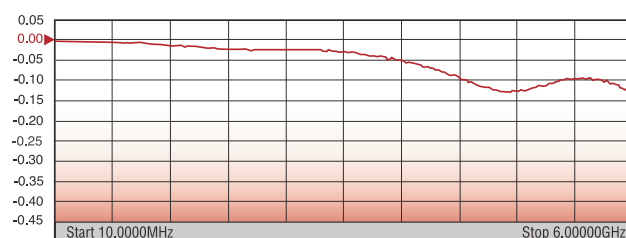
Component	Material	Plating
Body	Aluminum	White Bronze
Inner Conductor Male	Brass	Silver
Inner Conductor Female	Phosphor Bronze	Silver
Washer	Brass	White Bronze
Coupling Nut	Brass	White Bronze
Insulator	PTFE	--
O-Ring	Silicone Rubber	--

*All Dimensions shown in inches

S11 TYPICAL RETURN LOSS



S21 TYPICAL INSERTION LOSS



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