Times Protect

LP-GTR-N Series

- DC Pass Multi-Strike Design
- Replaceable Gas Tube
- Broadband Bidirectional Design
- Excellent IL/RL Performance Over the Entire Operating Frequency Band
- Fully Weatherized Housing
- Solid Brass Constuction for Durability and Long Life
- Includes Universal Right Angle Bracket Adaptor







Lightning and Surge Protection for The 21st CenturyTM

The Times-Protect™ LP-GTR-N series is an exceptional broadband DC pass design for lightning protection applications requiring DC power to be supplied to the electronics. Offering outstanding surge performance, the LP-GTR-N series is the perfect protection solution for distributed antenna systems, tower mounted amplifiers, GPS systems and other applications requiring DC pass circuitry. These devices exhibit outstanding RF performance with high surge current handling characteristics and cover a broad range of power handling requirements from 50 to 550 watts. 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 3000MHz.

LP-GTR-N Series:

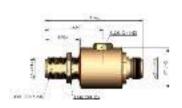
 LP-GTR-NFF (90Vdc/50W) • LP-GTR-NFF-23 (230Vdc/210W) • LP-GTR-NFF-35 (350Vdc/550W)

N Female connectors on both sides - bidirectional

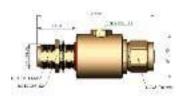
• LP-GTR-NFM (90Vdc/50W) • LP-GTR-NFM-23 (230Vdc/210W) • LP-GTR-NFM-35 (350Vdc/550W)

N Male connector on one side & N Female connector on the other side - bidirectional

Times-ProtectTM

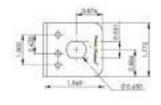


- LP-GTR-NFF
- LP-GTR-NFF-23
- LP-GTR-NFF-35 DC Pass N Type F/F



- LP-GTR-NFM
- LP-GTR-NFM-23
- LP-GTR-NFM-35
 DC Pass N Type F/M



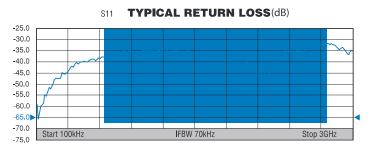


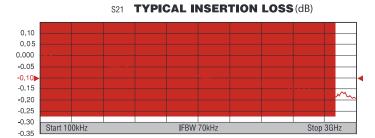
- · Universal Right Angle Bracket Adaptor
- *All Dimensions shown in inches

Electrical Specifications				
Impedance		50 Ω		
Frequency Range		DC-3000 MHz		
VSWR/Return Loss		< 1.1:1 / <-26dB (DC-2800MHz) < 1.13:1 / <-24dB (2800-3000MHz)		
Insertion Loss		< 0.1dB (DC-1000MHz) < 0.2dB (1000-3000Mhz)		
Maximum Surge Current		20kA multiple (8x20µs wave-form)		
Part Number: LP-GTR	NFF/NFM	NFF-23/NFM-23	NFF-35/NFM-35	
Impulse Sparkover	500V (1kV/μs)	700V (1kV/µs)	800V (1kV/μs)	
Turn on	90Vdc	230Vdc	350Vdc	
Average Power	50 Watts	210 Watts	550 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	0.2kg/pc \ 0.44lb			

Material Specifications				
Component	Material	Plating		
Body	Brass	White Bronze		
Inner Conductor Male	Brass	Silver		
Inner Conductor	Phosphor Bronze	Silver		
Washer	Brass	White Bronze		
Coupling Nut	Brass	White Bronze		
Insulator	TPX			
0-Ring	Silicone Rubber			







World Headquarters: 358 Hall Avenue, Wallingford, CT 06492 • Tel: 203-949-8400, 1-800-867-2629 • Fax: 203-949-8423 International Sales: 4 School Brae, Dysart, Kirkcaldy, Fife, Scotland KY1 2XB UK • Tel: +44(0)1592655428 China Sales: No. 318 Yuan Shan Road, Shanghai 201108 China • Tel: 86-21-51761234 • Fax: 86-21-64424098 www.timesmicrowave.com