

GF100-24TPNS

LASER-MARKABLE TWINAX CABLE



1-PAIR UNSHIELDED 100Ω 10/100BASE-T CABLE

The GIGAFLIGHT GF100-24TPNS is a 100Ω High Speed, Single Twisted, Data Pair Cable, which is designed for In-Flight Entertainment systems (IFE) where an unshielded cable meets the installation requirement. This cable is used in RS422, RS485, NTSC/PAL, and RS170 data and video applications where it has been determined that an unshielded data pair can be used.

The GF100-24TPNS is a laser-markable alternative to commonly used PIC E60224, with the added benefit of a silver-plated copper alloy (SPCA*) conductor.

Users of the new unshielded Twisted Pair Cable will benefit from reduced weight and size, greater flexibility, smaller bend radius, much lower cost, and reduced installation time!

**The SPCA, 24 gauge conductor will meet the requirements of SAE International Aerospace Standard AS50881, which states in paragraph 3.8.8, "Use of size 24 gauge wires in a harness shall be limited to wires which have break strength of 20lbs minimum."*

CABLE CONSTRUCTION

1	Conductor	24 AWG Stranded Silver-plated Copper Alloy
2	Insulation	Solid, High-temp Fluoropolymer
3	Fillers	FEP
4	Jacket	White, Laser-markable, Tefzel

ENVIRONMENTAL & MECHANICAL PROPERTIES

Outer Diameter	0.10" (2.54mm)
Weight	9 lbs/1000 ft (13 kg/1000m)
Operating Temperature	-55°C to +200°C
Minimum Bend Radius	0.60" (15.24mm)

ELECTRICAL PROPERTIES

Impedance	100Ω	
Capacitance	14.5 pF/ft (47.6 pf/m)	
Velocity of Propagation	70%	
DC Resistance	28.5Ω/1000ft max. (93.5Ω/1000m)	
Dielectric Voltage Rating	1.5 kV RMS	
Attenuation (+25°C)	Frequency	dB/100 ft
	10 MHz	1.9 (6.2)
	100 MHz	7.2 (23.6)

GIGAFLIGHT's aerospace cables are designed to be resistant to Skydrol, will meet requirements of RoHS & REACH, & meets Federal Aviation Regulations 14 CFR part 25.869 (a)(4), Appendix F part I (a)(3).

