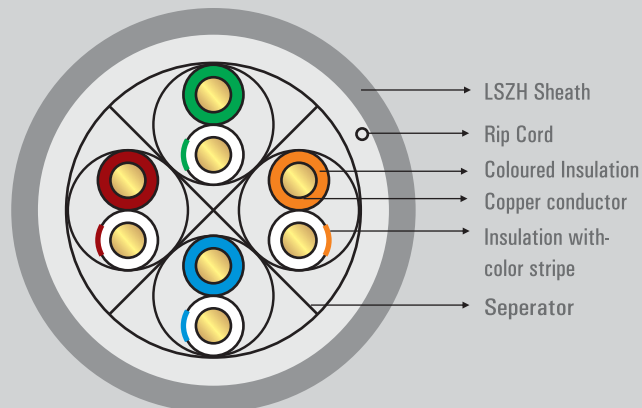## APPLICATION

Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 baseT) standard. Operates at bandwidth of 250MHz.

This cable well exceeds the requirements of TIA/EIA-568-C.2 and ISO/IEC 11801

- LSZH Sheath
- Rip Cord
- Coloured Insulation
- Copper conductor
- Insulation with-color stripe
- Seperator

CONSTRUCTION

Conductor:	23 AWG Solid bare Copper (4 pair)
Insulation:	High Density Polyethylene
Pairs:	2 Insulated conductors twisted together
Sheath:	LSZH
Cable Diameter:	6.1 mm nominal
Printing:	Each meter printed with sequential Length Counter

✦ ELECTRICAL PROPERTIES

Characteristic Impedance:	$100 \pm 15\Omega$
Conductor Resistance:	$< 9.38\ \Omega$ /100m
Mutual Capacitance:	< 5.6nF/100m
Resistance Unbalance:	5% Max
Capacitance Unbalance:	330pF/100m
Delay Skew:	< 45nS
NVP:	69%
Operating Voltage:	72V
Dielectric Strength:	1.0KV dc or 0.75KV ac for 1min

✦ COLOUR CODE

PAIR NO	COLOUR	PAIR NO	COLOUR
1-2	White-Orange Stripe and Orange	3-6	White-Green Stripe and Green
4-5	White-Blue Stripe and Blue	7-8	White-Brown Stripe and Brown

✦ TRANSMISSION CHARACTERISTICS PER 100M

Frequency MHz	Insertion Loss (dB/100m)	RL (dB)	NEXT (dB)	PSNEXT (dB)	ELFEXT (dB)	PSELFEXT (dB)	ACR (dB)	PSACR (dB)
1	2.0	20.0	74.3	72.3	67.8	64.8	72.3	70.3
4	3.8	23.0	65.3	63.3	55.8	52.8	61.5	59.5
8	5.3	24.5	60.8	58.8	49.7	46.7	55.5	53.5
10	6.0	25.0	59.3	57.3	47.8	44.8	53.3	51.3
16	7.6	25.0	56.2	54.2	43.7	40.7	48.6	46.6
20	8.5	25.0	54.8	52.8	41.8	38.8	46.3	44.3
25	9.5	24.3	53.3	51.3	39.8	36.8	43.8	41.8
31.25	10.7	23.6	51.9	49.9	37.9	34.9	41.2	39.2
62.5	15.4	21.5	47.4	45.4	31.9	28.9	32.0	30.0
100	19.8	20.1	44.3	42.3	27.8	24.8	24.5	22.5
200	29.0	18.0	39.8	37.8	21.8	18.8	10.8	8.8
250	32.8	17.3	38.3	36.3	19.8	16.8	5.5	3.5

dB NEXT — Frequency (MHz)

dB RL @ Remote — Frequency (MHz)
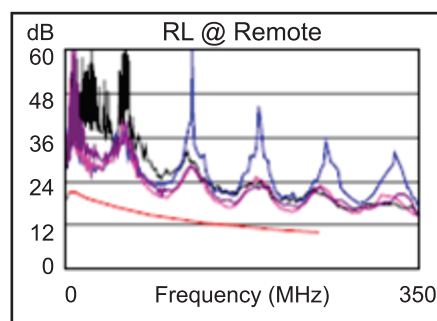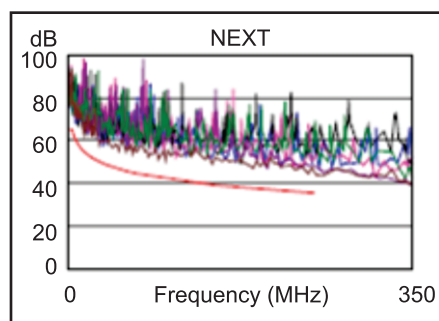
✦ MECHANICAL PROPERTIES

Bending Radius: < 25.4mm at −20°C ± 1°C

Pulling Force: 11.5 Kg

Operating Temperature Range: −20°C to +70°C

Storage Temperature Range: 0°C to +50°C

✦ CONNECTION SYSTEM

Compatible with all common systems according to
TIA/EIA 568-C.2 and ISO/IEC 11801

✦ PACKING

Available in easy-pull boxes/Reels of guaranteed 305m Length

✦ ORDERING INFORMATION

Part Code	Description
NCB-C6UGRYR-305-LS	Solid Cable Cat6, 4pair, UTP-LSZH, 305M