SCP Structured Cable Products

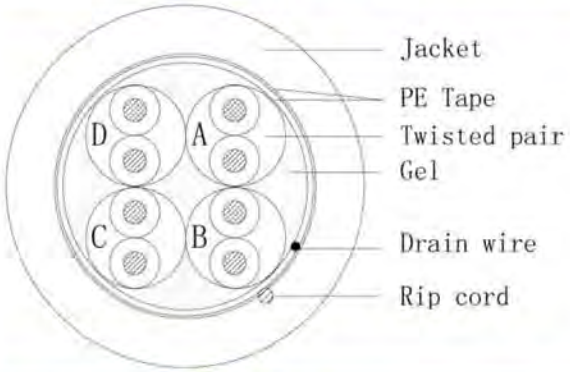
Quality Installations Deserve Quality Products

CAT 5E DIRECT BURIAL GEL

PART# CAT5E-DB-GEL

4×2×0.515 DATE:2009.05.27

Cross Section



Description

Rated Temperature (°C)	70
Rated Voltage(V)	30
Product Standard Certification	
Flammability Test	IEC-332-1

Construction

Conductor	**Solid Bare Copper**
AWG	24
Conductor Dia. (±0.005mm)	0.515
Insulation	**PE**
Average Thickness(mm)	0.228
Min. Point Thickness(mm)	0.220
Insulation Dia.(±0.01mm)	0.97
Twisted Pair Dia.(±0.01)	**1.94**
Filler	**Gel**
Pe-tape	**YES**
Drain wire (TC)	**0.40**
Al-foil	**YES**
Pe-tape	**YES**
Assembly Dia.(mm)	**4.80**
Jacket	**LLDPE**
Average Thickness(mm)	0.70
Min. Point Thickness(mm)	0.63
Outer Dia.(±0.30mm)	**6.40**
Rip Cord	Per request

Color

The color of the wire pair in cables

A:Blue-White with Blue

B:Orange-White with Orange

C:Green-White with Green

D:Brown-White with Brown

The jacket color:

BLACK

Marking

4PR CAT 5E ENHANCED (UL) OR C(UL) E198134

24AWG 350MHZ DIRECT BURIAL (FLOODED) OUTDOOR

VERIFIED TO TIA/EIA 568B.2 STRUCTURED CABLE PRODUCTS

ZONE/JACK A B C D E 0 1 2 3 4 5 6 7 8 9 ROHS ce xxxxFT

Performance

Electrical Characteristics:

1.0-350.0MHz Impedance (ohms)	100 ± 15
1.0-350.0MHz Delay Skew (ns/100m)	<=45
Pair-to-Ground Capacitance Unbalance (pF/100m)	<=330
Max. Conductor DC Resistance 20°C (ohms/km)	95
Resistance Unbalance (%)	<=5

Frequency (MHz)	Return loss (Min dB)	Attenuation Max (dB/100m)	NEXT (Min dB)
1	20.0	2.0	68.3
4	23.0	4.1	59.3
8	24.5	5.8	54.8
10	25.0	6.5	53.3
16	25.0	8.2	50.3
20	25.0	9.3	48.8
25	24.3	10.4	47.3
31.25	23.6	11.7	45.9
62.5	21.5	17.0	41.4
100	20.1	22.0	38.3
155	18.8	28.1	35.5
200	18.0	32.4	33.8
240	17.4	36.0	32.6
300	16.8	41.0	31.2
350	16.3	44.9	30.1

Frequency (MHz)	PSNEXT Min (dB)	ELFEXT Min (dB/100m)	PSELFEXT in (dB/100m)
1	66.3	63.8	60.8
4	57.3	51.7	48.7
8	52.8	45.7	42.7
10	51.3	43.8	40.8
16	48.3	39.7	36.7
20	46.8	37.8	34.8
25	45.3	35.8	32.8
31.25	43.9	33.9	30.9
62.5	39.4	27.8	24.8
100	36.3	24.0	21.0
155	33.5	20.0	17.0
200	31.8	17.7	14.7
240	30.6	16.2	13.2
300	29.2	14.2	11.2
350	28.1	12.9	9.9

Mechanical Characteristics:

Test Object		Jacket
Test Material		LLDPE
Before Aging	Tensile Strength (Mpa)	>=13.8
	Elongation (%)	>=100
Aging Condition (°Cxhrs)		100x168
After Aging	Tensile Strength (Mpa)	>=85% of unaged
	Elongation (%)	>=50% of unaged
Cold Bend(-20±2°Cx4hrs)		No crack