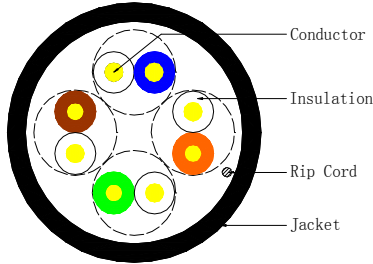


Product Specification sheet for:

# CAT5E-DB

CAT5E DIRECT BURIAL- 350 MHz 23 AWG UTP, GEL TYPE

## CONSTRUCTION DETAIL



## PHYSICAL CONSTRUCTION

Pairs	4
Total Conductor	8
AWG	24
Dia. of Conductor	Φ 0.50±0.01mm
Material	Solid Bare Copper
Elongation	≥15%
<b>2) Insulate:</b>	
Material	HDPE - Polyethylene
Nom. Thickness	0.19mm
Dia.	Φ 0.88±0.03mm
Elongation	≥300%
Color Cord	Pair 1: White-Blue & Blue      Pair 3: White-Green & Green Pair 2: White-Orange & Orange      Pair 4: White-Brown & Brown
<b>3) Paired:</b>	
Length of Lay	<30mm
<b>4) Cabling:</b>	
Order of the Pair	See the Cross Section
<b>5) Sheath:</b>	
Material	PVC - Polyvinyl Chloride
Color Blue	
Rip Cord	200D×3
Nom. Thickness	0.54±0.05mm
Min. Thickness	0.40mm
<b>COLOR</b>	
Jacket	Black

## SPECIFICATION CONTROL

Structured Cable Products specifications are subject to change without notice. Please contact a sales representative for a current product specification. Structured Cable Products strives to ensure product specifications are complete, current, and accurate. Please note, all physical specifications are nominal.

## ELECTRICAL CHARACTERISTICS

Standard	TIA/EIA-568-B.2 & IEC/ISO 11801
Product Standard Certification	E310605
<b>Test Item</b>	<b>Units</b> <b>Spec</b>
1. Conductor D.C. Resistance	Ω/100m      ≤9.5
2. Unbalance of Pair D.C Resistance	%      ≤2.5
3. Dielectric Strength between Pairs	kv/min      ≤1.0
4. Insulation Resistance	MΩ·km      ≥5000
5. Capacitance	nF/100m      ≤5.6
6. Unbalance of Capacitance	pF/100m      ≤330
7. Characteristic impedance(1 to 100MHz)	Ω      100±15
8. Characteristic impedance(155 to 350MHz)	Ω      100±25
9. Short or Open of the loop	-      none
10. Shield	-      -

FREQUENCY (MHZ)	RETURN LOSS (MIN DB)	SRL (DB)	ATTENUATION MAX(MIN DB)	NEXT (DB/100M)
1	20.0	28.0	2.0	65.3
4	23.0	28.0	3.8	56.3
8	24.5	28.0	5.3	51.8
10	25.0	28.0	6.0	50.3
16	25.0	28.0	7.6	47.2
20	25.0	25.0	8.5	45.8
25	24.3	27.0	9.5	44.3
31.25	23.6	26.1	10.7	42.9
62.5	21.5	23.1	15.4	38.4
100	20.1	21.0	19.8	35.3
155	18.8	19.1	27.6	32.5
200	18.0	18.0	29.0	30.8
250	17.3	15.6	32.8	29.3
300	16.8	16.2	40.0	28.1
350	16.3	15.6	43.8	27.1

FREQUENCY (MHZ)	PSNEXT (MIN(DB))	ELFEXT (MIN(DB/100M))	PSELFEXT (DB/100M) MAX	DELAY (NS/100M)
1	62.3	64.0	61.0	45.0
4	53.3	52.0	49.0	45.0
8	48.8	28.0	42.9	45.0
10	47.3	28.0	41.0	45.0
16	44.2	28.0	36.9	45.0
20	42.8	25.0	35.0	45.0
25	41.3	27.0	33.0	45.0
31.25	39.9	26.1	31.1	45.0
62.5	35.4	23.1	25.1	45.0
100	32.3	21.0	21.0	45.0
155	29.5	19.1	17.2	45.0
200	27.8	18.0	15.0	45.0
250	26.3	15.6	13.0	45.0
300	25.1	16.2	11.5	45.0
350	24.1	15.6	10.1	45.0

## MECHANICAL CHARACTERISTICS

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