

SCP PART#: CAT6A-F/FTP-BL-ETL

Rev 05/20

Content of the Data Sheet																																																																																																																																																					
Sheath Printing	TBD																																																																																																																																																				
Category	F/FTP CAT6A-4P-PVC																																																																																																																																																				
Test Standard	ISO/IEC11801 ANSI/TIA 568.2-D																																																																																																																																																				
Conductor	Material	SOLID-Bare Copper																																																																																																																																																			
	Nom.O.D.(mm)	23AWG	up	+0.005																																																																																																																																																	
		G	down	-0.005																																																																																																																																																	
Insulation	Material	Skin-foam-skin PE																																																																																																																																																			
	Diameter	1.330±0.05 mm																																																																																																																																																			
Screening Material	Al/Mylar	Drain wire	Yes																																																																																																																																																		
Sheath	Thickness	0.55±0.05 mm																																																																																																																																																			
	External O.D.	7.5±0.5 mm																																																																																																																																																			
	Surface	Clean																																																																																																																																																			
	Material	PVC(complies RoHS)																																																																																																																																																			
	Color	TBD																																																																																																																																																			
Surface Printing	Letter height	3.0±0.3mm																																																																																																																																																			
	Color	Black																																																																																																																																																			
	Print error & Space	≤±0.5%, 1m																																																																																																																																																			
Core Color	1 White/Blue	2 White/Orange																																																																																																																																																			
	3 White/Green	4 White/Brown																																																																																																																																																			
Packing	Wooden Tray																																																																																																																																																				
Wooden Tray dimension	According to requirements																																																																																																																																																				
Packing length	305 ± 1.5m																																																																																																																																																				
Rip-cord	Yes																																																																																																																																																				
Sheath Physical Properties	Before Aging Tensile Strength (Mpa)	≥13.5																																																																																																																																																			
	Elongation(%)	≥150																																																																																																																																																			
	Aging Period (°C × hrs)	100°C × 24h × 7d																																																																																																																																																			
	After Aging Tensile Strength(Mpa)	≥12.5																																																																																																																																																			
	Elongation(%)	≥125																																																																																																																																																			
	Cold bend(-20±2°C×4h) 8×Cable O.D., No visible cracks																																																																																																																																																				
Electrical Characteristics (20°C)	Impedance(Ω)	1.0-250.0MHz	100 ± 15																																																																																																																																																		
		250.0-500.0MHz	100 ± 22																																																																																																																																																		
	1.0-500.0MHz Delay Skew (ns/100m)	≤45																																																																																																																																																			
	unbalanced-to-ground capacitance(pf/100m)max	330																																																																																																																																																			
	DC Resistance (Ω/100m) max	9.38																																																																																																																																																			
	DC Conductor Resistance Unbalance (%) max	5.0																																																																																																																																																			
Technical Performance (100m) : <table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>RL ≥dB</th> <th>ATT ≤dB</th> <th>NEXT ≥dB</th> <th>PHASE DELAY ≤ns</th> </tr> </thead> <tbody> <tr><td>1</td><td>20.0</td><td>—</td><td>74.3</td><td>570</td></tr> <tr><td>4.0</td><td>23.0</td><td>3.8</td><td>65.3</td><td>552</td></tr> <tr><td>8.0</td><td>24.5</td><td>5.3</td><td>60.8</td><td>547</td></tr> <tr><td>10.0</td><td>25.0</td><td>5.9</td><td>59.3</td><td>545</td></tr> <tr><td>16.0</td><td>25.0</td><td>7.5</td><td>56.2</td><td>543</td></tr> <tr><td>20.0</td><td>25.0</td><td>8.4</td><td>54.8</td><td>542</td></tr> <tr><td>25.0</td><td>24.3</td><td>9.4</td><td>53.3</td><td>541</td></tr> <tr><td>31.25</td><td>23.6</td><td>10.5</td><td>51.9</td><td>540</td></tr> <tr><td>62.5</td><td>21.5</td><td>15.0</td><td>47.4</td><td>539</td></tr> <tr><td>100</td><td>20.1</td><td>19.1</td><td>44.3</td><td>538</td></tr> <tr><td>200</td><td>18.0</td><td>27.6</td><td>39.8</td><td>537</td></tr> <tr><td>250</td><td>17.3</td><td>31.1</td><td>38.3</td><td>536</td></tr> <tr><td>300</td><td>16.8</td><td>34.3</td><td>37.1</td><td>536</td></tr> <tr><td>400</td><td>15.9</td><td>40.1</td><td>35.3</td><td>536</td></tr> <tr><td>500</td><td>15.2</td><td>45.3</td><td>33.8</td><td>536</td></tr> </tbody> </table> <table border="1"> <thead> <tr> <th>Frequency (MHz)</th> <th>PSNEXT ≥dB</th> <th>ELFEXT ≥dB</th> <th>PSELFEXT ≥dB</th> </tr> </thead> <tbody> <tr><td>1</td><td>72.3</td><td>67.8</td><td>64.8</td></tr> <tr><td>4</td><td>63.3</td><td>55.8</td><td>52.8</td></tr> <tr><td>8</td><td>58.8</td><td>49.7</td><td>46.7</td></tr> <tr><td>10</td><td>57.3</td><td>47.8</td><td>44.8</td></tr> <tr><td>16</td><td>54.2</td><td>43.7</td><td>40.7</td></tr> <tr><td>20</td><td>52.8</td><td>41.8</td><td>38.8</td></tr> <tr><td>25</td><td>51.3</td><td>39.8</td><td>36.8</td></tr> <tr><td>31.25</td><td>49.9</td><td>37.9</td><td>34.9</td></tr> <tr><td>62.5</td><td>45.4</td><td>31.9</td><td>28.9</td></tr> <tr><td>100</td><td>42.3</td><td>27.8</td><td>24.8</td></tr> <tr><td>200</td><td>37.8</td><td>21.8</td><td>18.8</td></tr> <tr><td>250</td><td>36.3</td><td>19.8</td><td>16.8</td></tr> <tr><td>300</td><td>35.1</td><td>18.3</td><td>15.3</td></tr> <tr><td>400</td><td>33.3</td><td>15.8</td><td>12.8</td></tr> <tr><td>500</td><td>31.8</td><td>13.8</td><td>10.8</td></tr> </tbody> </table>						Frequency (MHz)	RL ≥dB	ATT ≤dB	NEXT ≥dB	PHASE DELAY ≤ns	1	20.0	—	74.3	570	4.0	23.0	3.8	65.3	552	8.0	24.5	5.3	60.8	547	10.0	25.0	5.9	59.3	545	16.0	25.0	7.5	56.2	543	20.0	25.0	8.4	54.8	542	25.0	24.3	9.4	53.3	541	31.25	23.6	10.5	51.9	540	62.5	21.5	15.0	47.4	539	100	20.1	19.1	44.3	538	200	18.0	27.6	39.8	537	250	17.3	31.1	38.3	536	300	16.8	34.3	37.1	536	400	15.9	40.1	35.3	536	500	15.2	45.3	33.8	536	Frequency (MHz)	PSNEXT ≥dB	ELFEXT ≥dB	PSELFEXT ≥dB	1	72.3	67.8	64.8	4	63.3	55.8	52.8	8	58.8	49.7	46.7	10	57.3	47.8	44.8	16	54.2	43.7	40.7	20	52.8	41.8	38.8	25	51.3	39.8	36.8	31.25	49.9	37.9	34.9	62.5	45.4	31.9	28.9	100	42.3	27.8	24.8	200	37.8	21.8	18.8	250	36.3	19.8	16.8	300	35.1	18.3	15.3	400	33.3	15.8	12.8	500	31.8	13.8	10.8
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