



#### **Description:**

300V Class 2 Thin, 22 and 24 AWG stranded tinned copper conductors, PVC insulation (power), FRFPE insulation (Data), 100% individually foil shielded and an overall 65% tinned copper braid, drain wire, sunlight/oil-resistant PVC jacket.

#### **PHYSICAL CHARACTERISTICS:**

#### CONDUCTOR:

Number of Pairs	2	
Number of Conductors	4	
AWG :		

Number of Pairs	AWG	Stranding	Conductor Material	Conductor Diameter (in.)
1	22	19x34	TC - Tinned Copper	
1	24	19x36	TC - Tinned Copper	

Stranding	19x34, 19x36
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Conductor Material

TC - Tinned Copper

#### **INSULATION:**

PVC - Polyvinyl Chloride, FRFPE - Flame Retardant Foam Polyethylene

Insulation Material (Multi-AWG) :

AWG	Layer Number	Material Trade Name	Material	Wall Thickness (in.)	Diameter (in.)
22			PVC - Polyvinyl Chloride		
24			FRFPE - Flame Retardant Foam Polyethylene		

#### Pair Color Code Chart :

Number	Color	Number	Color
22 AWG Pair	Red & Black	24 AWG Pair	Blue & White

#### **INNER SHIELD:**

Inner Shield Type	Tape/Tape
Inner Shield Material :	

Insulation Material



Layer Number/Descri ption	Material Trade Name	Туре	Material	% Coverage (%)	Stranding	Diameter (in.)	Conductor Material		
22 AWG Pair		Таре	Aluminum Foil- Polyester Tape	100					
24 AWG Pair		Таре	Aluminum Foil- Polyester Tape	100					
Inner Shield % Co	overage		100 %						
Inner Shield Drain	n Wire AWG		22						
Inner Shield Drain	n Wire Stranding		19x34						
Inner Shield Drain	n Wire Conductor	r Material	TC - Tinned (	Copper					
OUTER SHIEL	D:								
Outer Shield Type	e		Braid						
Outer Shield Mate	erial		TC - Tinned	Copper					
Outer Shield %Co	overage		65 %						
OUTER JACKI	ET:								
Outer Jacket Mate	erial		PVC - Polyvi	nyl Chloride					
OVERALL NO	MINAL DIAME	TER:							
Overall Nominal	Diameter		.280 in.						
MECHANICAL	CHARACTER	ISTICS:							
Operating Tempe	rature Range		-20°C To +75	5°C					
UL Temperature	Rating		75°C						
Bulk Cable Weight			41 lbs/1000 ft	41 lbs/1000 ft.					
Max. Recommended Pulling Tension			65 lbs.						
Min. Bend Radius (Install)			2.75 in.						
APPLICABLES	SPECIFICATIO	NS AND AGE	NCY COMPLIAN	CE:					
APPLICABLES	STANDARDS:								
NEC/(UL) Specif	ication		CMG, CL2						
CEC/C(UL) Spec	ification		CMG						
AWM Specificati	on		I/II A						
FLAME TEST:									
UL Flame Test			UL1581 Vert	ical Tray					
CSA Flame Test			FT4						
SUITABILITY:									
Sunlight Resistan	ce		Yes						
Oil Resistance			Yes						
ELECTRICAL	CHARACTERI	STICS:							

Nom. Characteristic Impedance :



Nom. Inductance :   Nom. Inductance (µII/ft)     22 AWG Pair   .221     24 AWG Pair   .251     Nom. Capacitance Conductor to Conductor @ 1 KHz   24 AWG pair 1.2.0 pF/ft     Nom. Capacitance Conductor to Conductor :			Nom. Chara	acteristic Impedance (Ohm	s)		
Description     Nom. Inductance (µH/ft)       22 AWG Pair     .221       24 AWG Pair     .251       Nom. Capacitance Conductor to Conductor @ 1 KHz     24 AWG pair 12.0 pF/ft       Nom. Capacitance Conductor to Conductor :     Description       Description     Frequency (kHz)     Start Frequency (kHz)     Stop Frequency (kHz)     Nom. Capacitance Conductor to Conduct (pF/ft)       24 AWG Pair     1     12.0     Nom. Capacitance Conductor to Conduct (pF/ft)       24 AWG Pair     1     Nominal Velocity of Propagation (%)     24 AWG Pair     12.0       Nominal Velocity of Propagation :     Description     Nominal Velocity of Propagation (%)     24 AWG Pair     75       Maximum Delay :     Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Maximum Delay (ns/ft 24 AWG Pair       24 AWG Pair     17.5     24 AWG     1.36       Maximum Conductor DC Resistance :     Description     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft)       24 AWG     28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C 3.2 Ohms/1000 ft     300 V RMS     29     500     50     50     50     50     50	24 AWG Pair			120			
22 AWG Pair     221       24 AWG Pair     .251       Nom. Capacitance Conductor to Conductor @ 1 KHz     24 AWG pair 12.0 pF/ft       Nom. Capacitance Conductor to Conductor :	Nom. Inductance :			•			
24 AWG Pair   .251     Nom. Capacitance Conductor to Conductor @ 1 KHz   24 AWG pair 12.0 pF/ft     Nom. Capacitance Conductor to Conductor :   Start Frequency (kHz)   Stop Frequency (kHz)   Nom. Capacitance Conductor to Condu	Description			Nom. Induc	tance (µH/ft)		
Nom. Capacitance Conductor to Conductor @ 1 KHz   24 AWG pair 12.0 pF/ft     Nom. Capacitance Conductor to Conductor :   Start Frequency (kHz)   Start Frequency (kHz)   Nom. Capacitance Conductor to Conductor (pF/ft)     24 AWG Pair   1   Image: Conductor to Conductor (pF/ft)   Nom. Capacitance Conductor to Conduct	22 AWG Pair			.221			
Nom. Capacitance Conductor to Conductor :   Start Frequency (kHz)   Stop Frequency (kHz)   Nom. Capacitance Conductor to Conduct     24 AWG Pair   1   12.0   12.0     Nominal Velocity of Propagation :   Nominal Velocity of Propagation (%)   24 AWG Pair   75     Maximum Delay :   Nominal Velocity of Propagation (%)   Maximum Delay :   Maximum Delay :   Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft data)     24 AWG   17.5   28.0   28.0   3.2 Ohms/1000 ft dbt/100 ft.)     Max. Attenuation (dB/100 ft.) :   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.)     Description   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft   3.2 Ohms/1000 ft   3.2 Ohms/1000 ft.)     Max. Attenuation (dB/100 ft.) :   Erequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG   .   .   .   .   .   .     Description   Frequency (M	24 AWG Pair			.251			
Description     Frequency (kHz)     Start Frequency (kHz)     Stop Frequency (kHz)     Nom. Capacitance Conductor to Conduct (pF/ft)       24 AWG Pair     1     12.0     12.0       Nominal Velocity of Propagation :     Nominal Velocity of Propagation (%)     12.0       24 AWG Pair     75     12.0       Maximum Delay :     Nominal Velocity of Propagation (%)     Maximum Delay (MHz)     Maximum Conductor OC Resistance :     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000 ft       24 AWG     17.5     28.0     28.0     28.0     32.0 Hms/1000 ft     Max. Attenuation (dB/100 ft.) :     Max. Attenuation (dB/100 ft.) :     UK     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       Max. Attenuation (dB/100 ft.) :     UL     300 V RMS     .50     .70     .70       Max. Operating Voltage - UL :     UL     .29	-		24 AWG pair	12.0 pF/ft			
Conductor to Conduct (pF/ft)Conductor to Conduct (pF/ft)24 AWG Pair112.0Nominal Velocity of Propagation :Description24 AWG Pair75Maximum Delay :DescriptionFrequency (MHz)Start Frequency (MHz)Maximum Delay (ms/ft)24 AWG Pair1.361.36Maximum Conductor DC Resistance :DescriptionStart Frequency (MHz)Stop Frequency (MHz)Maximum Delay (ms/ft)24 AWG Pair1.361.36Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/100022 AWG17.524 AWG24 AWG28.017.5ValueMax. Attenuation (dB/100 ft.) :DescriptionFrequency (MHz)Start Frequency (MHz)Max. Attenuation (dB/100 ft.) :DescriptionFrequency (MHz)Start Frequency (MHz)Max. Attenuation (dB/100 ft.) :DescriptionFrequency (MHz)Start Frequency (MHz)Max. Attenuation (dB/100 ft.) :24 AWG Pair Only.125.29.500.50.50.1000.50.50.1000.70.70Max. Operating Voltage - UL :ULVUL300 V RMSCL2, CMG300 V RMSCL2, CMG300 V RMSCL2, CMG				(1 )			
Nominal Velocity of Propagation :   Nominal Velocity of Propagation (%)     24 AWG Pair   75     Maximum Delay :   Start Frequency (MHz)   Stop Frequency (MHz)   Maximum Delay (ns/ft     24 AWG Pair   75     Maximum Conductor DC Resistance :   Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000     22 AWG   17.5     24 AWG   17.5     Variable Object   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :   Start Frequency (MHz)   Stop Frequency (MHz)     Description   Frequency (MHz)   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.) :     Description   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.) :     Description   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.) :     Description   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29   .50   .50   .70     Max. Operating Voltage - UL :   UL   .50   .70   .70	Description	Frequency (kHz)	Start Frequency (kHz)		Stop Frequency (kHz)	Conductor to Conductor	
Description     Nominal Velocity of Propagation (%)       24 AWG Pair     75       Maximum Delay :     75       Description     Frequency (MHz)     Start Frequency (MHz)     Maximum Delay (MHz)     Maximum Delay (MHz)       24 AWG Pair     Start Frequency (MHz)     Stop Frequency (MHz)     Maximum Delay (ms/ft)       24 AWG Pair     I.36     1.36       Maximum Conductor DC Resistance :     Description     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       22 AWG     17.5     24.0     28.0       Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       24 AWG Pair Only     .125     .29     .500     .50     .50       .1.000     .500     .70     .70     .70     .70       Max. Operating Voltage - UL :     UL     .29     .50     .50     .70       <	24 AWG Pair	1				12.0	
24 AWG Pair     75       Maximum Delay :     Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Maximum Delay (ns/ft       24 AWG Pair     1.36     Maximum Conductor DC Resistance :     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       Maximum Conductor DC Resistance :     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       22 AWG     17.5     24 AWG     28.0       Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       24 AWG Pair Only     .125     .29     .50     .50     .50       1.000     .70     .50     .70     .70     Max. Operating Voltage - UL :     UL     .50       100 V RMS     CL2, CMG     .20     .20     .50     .50     .50       300 V RMS     CL2, CMG     .20     .20	Nominal Velocity of Pro-	pagation :					
Maximum Delay :   Maximum Conductor DC Resistance (MHz)   Stop Frequency (MHz)   Maximum Delay (ns/ft     24 AWG Pair   1.36     Maximum Conductor DC Resistance :   1.36     Description   Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000     22 AWG   17.5     24 AWG   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :   500     Description   Frequency (MHz)   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29   .500   .50     .500   .500   .50   .70   .50     Max. Operating Voltage - UL :   UL   .50   .70     Max. Operating Voltage - UL :   UL   .50   .50   .50     .300 V RMS   CL2, CMG   .20 C(UL) AWM   .50   .50	Description			Nominal Ve	locity of Propagation (%)		
Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Maximum Delay (ns/ft       24 AWG Pair     1.36       Maximum Conductor DC Resistance :     1.36       Description     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       22 AWG     17.5       24 AWG     28.0       Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft       Max. Attenuation (dB/100 ft.) :     3.2 Ohms/1000 ft       Max. Attenuation (dB/100 ft.) :     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       24 AWG Pair Only     .125	24 AWG Pair						
24 AWG Pair     1.36       Maximum Conductor DC Resistance :     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       22 AWG     17.5       24 AWG     17.5       24 AWG     28.0       Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft       Max. Attenuation (dB/100 ft.) :     Start Frequency (MHz)     Max. Attenuation (dB/100 ft.)       Description     Frequency (MHz)     Start Frequency (MHz)     Max. Attenuation (dB/100 ft.)       24 AWG Pair Only     .125     .29     .500     .50       .1000     .70     .70       Max. Operating Voltage - UL :     UL     .70       UL Voltage     UL     .70       300 V RMS     CL2, CMG     .20       .300 V RMS     .21     .22	Maximum Delay :						
Maximum Conductor DC Resistance :   Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000     22 AWG   17.5     24 AWG   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.)     Description   Frequency (MHz)   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29     .500   .50   .50     1.000   .70   .70     Max. Operating Voltage - UL :   UL   .70     UL Voltage   UL   .21, CMG     300 V RMS   CL2, CMG   .CUL) AWM	Description	Frequency (MHz)	Start Freque	ency (MHz)	Stop Frequency (MHz)	Maximum Delay (ns/ft)	
Description     Maximum Conductor DC Resistance @ 20 Deg. C (Ohms/1000       22 AWG     17.5       24 AWG     28.0       Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft       Max. Attenuation (dB/100 ft.) :     3.2 Ohms/1000 ft       Description     Frequency (MHz)     Start Frequency (MHz)     Stop Frequency (MHz)     Max. Attenuation (dB/100 ft.)       24 AWG Pair Only     .125     .29     .29     .500     .50     .50     .70       Max. Operating Voltage - UL :     UL     .70     .70     .70     .70       Max S     CL2, CMG     .20 V RMS     .22, CMG     .20 V RMS     .22 V CL2, CMG     .20 V RMS     .20 V	24 AWG Pair					1.36	
22 AWG   17.5     24 AWG   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C     3.2 Ohms/1000 ft   Max. Attenuation (dB/100 ft.) :     Description   Frequency (MHz)   Start Frequency (MHz)   Stop Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29   .29     .500   .500   .50   .50     1.000   .70   .70     Max. Operating Voltage - UL :   UL   .70     UL Voltage   UL   .22, CMG     300 V RMS   CL2, CMG   .20     300 V RMS   C(UL) AWM   .20	Maximum Conductor DO	C Resistance :					
24 AWG   28.0     Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :   Max. Attenuation (dB/100 ft.)     Description   Frequency (MHz)   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29     .500   .50   .50     1.000   .70   .70     Max. Operating Voltage - UL :   UL     UL Voltage   UL     300 V RMS   CL2, CMG     300 V RMS   C(UL) AWM	Description			Maximum (	Conductor DC Resistance @	20 Deg. C (Ohms/1000 ft)	
Nominal Outer Shield DC Resistance @ 20 Deg. C   3.2 Ohms/1000 ft     Max. Attenuation (dB/100 ft.) :	22 AWG			17.5			
Max. Attenuation (dB/100 ft.) :   Frequency (MHz)   Start Frequency (MHz)   Max. Attenuation (dB/100 ft.)     24 AWG Pair Only   .125   .29     .500   .50   .50     1.000   .70     Max. Operating Voltage - UL :   UL     200 V RMS   CL2, CMG     300 V RMS   C(UL) AWM	24 AWG			28.0			
DescriptionFrequency (MHz)Start Frequency (MHz)Stop Frequency (MHz)Max. Attenuation (dB/100 ft.)24 AWG Pair Only.125.29.500.500.501.000.70Max. Operating Voltage - UL :.70UL Voltage300 V RMSCL2, CMG300 V RMSC(UL) AWM	Nominal Outer Shield Do	C Resistance @ 20 Deg. C	3.2 Ohms/10	00 ft			
24 AWG Pair Only .125 .29   .500 .500 .50   1.000 .70	Max. Attenuation (dB/10	0 ft.) :					
.500     .50       1.000     .70         Max. Operating Voltage - UL :         UL Voltage     UL       300 V RMS     CL2, CMG       300 V RMS     C(UL) AWM	Description	Frequency (MHz)	Start Freque	ency (MHz)	Stop Frequency (MHz)		
I.000     .70       Max. Operating Voltage - UL :     UL       UL Voltage     UL       300 V RMS     CL2, CMG       300 V RMS     C(UL) AWM	24 AWG Pair Only	.125				.29	
UL UL   300 V RMS CL2, CMG   300 V RMS C(UL) AWM							
UL VoltageUL300 V RMSCL2, CMG300 V RMSC(UL) AWM		.500				.50	
300 V RMS     CL2, CMG       300 V RMS     C(UL) AWM							
300 V RMS C(UL) AWM	Max. Operating Voltage	1.000					
		1.000		UL			
	UL Voltage	1.000					
	UL Voltage 300 V RMS	1.000		CL2, CMG	1		
Max. Recommended Current 2.4 Amps per conductor @ 25°C, 1.7 Amps per conductor @ 25°C (24 AWG)	UL Voltage 300 V RMS	1.000		CL2, CMG	1		
NOTES:	UL Voltage       300 V RMS       300 V RMS       600 V RMS	- UL :	2.4 Amps per	CL2, CMG C(UL) AWN UL AWM		.70	
NotesFlex Life: +/- 90 Degree Flex Test, 2" Diameter, 2 lbs. tension: 2000 Cycles minimum. Meter marks on jacket to aid users in installation.	UL Voltage 300 V RMS 300 V RMS 600 V RMS Max. Recommended Cur	- UL :	2.4 Amps per	CL2, CMG C(UL) AWN UL AWM		.70	

### PUT-UPS AND COLORS:

Item	Description	Put-Up (ft.)	Ship Weight (lbs.)	Jacket Color	Notes
3084A T5U1000	2 #22, 2 #24 SHLD PVC	1000	50	GRAY T5U	CZ



3084A T5U2000	2 #22, 2 #24 SHLD PVC	2000	100	GRAY T5U	С
3084A T5U500	2 #22, 2 #24 SHLD PVC	500	26	GRAY T5U	CZ

C = CRATE REEL PUT-UP.

Z = FINAL PUT-UP LENGTH MAY VARY (+ OR -) 10% FOR SPOOLS OR REELS AND (+ OR -) 5% FOR UNREEL CARTONS FROM LENGTH SHOWN.

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