

New Cable Technology for Faster Speeds

Al Kelley - Tensolite
Jan/6/1998

This specification describes a shielded and jacketed composite cable designed to meet the requirements of IEEE P1394 specification.

COMPONENT #1: 28450/9J108F-2(Z) (attached) **(EXPANDED PTFE DIELECTRIC)**
COMPONENT #2: 22342/9J016NA-1 (attached)

CABLE

Two(2) ends of Component #1 and two(2) ends of Component #2 are cabled together.
 OD(nom): .150"

SHIELD #1

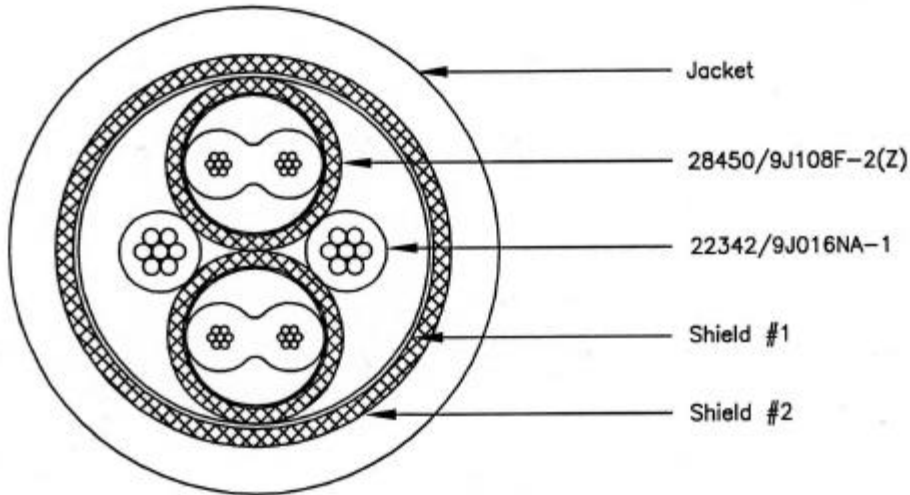
Material: Foil-free Edge Aluminum/Polyester Tape (Alum. Up)
 OD(nom): .154"

SHIELD #2

Material: Tin-coated Copper Braid
 Coverage(min): 90%
 OD(nom): .172"

JACKET

Material: Extruded PVC
 Wall Thickness(nom): .034"
 OD(nom): .240"



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			Drawn by: Lira Stewart <i>LS</i>	Date: 12/16/97
This document, containing proprietary information of the Tensolite Company, is strictly confidential and is not to be disclosed by any person without the written consent of the Tensolite Company.			Approved By: John Beatty <i>JB</i>	Date: 12/16/97
			Description: 2 TWINAXES & 2 POWER LEADS, BUNDLED WITH OVERALL SHIELD AND JACKET	
			Tensolite P/N: 28450/9J108LV-6(Z)	File: 9J108LV
B	12/16/97	Made changes to component #1		
A	7/29/96	Initial Release		

Attenuation Comparison (dB / 4.5 meters)

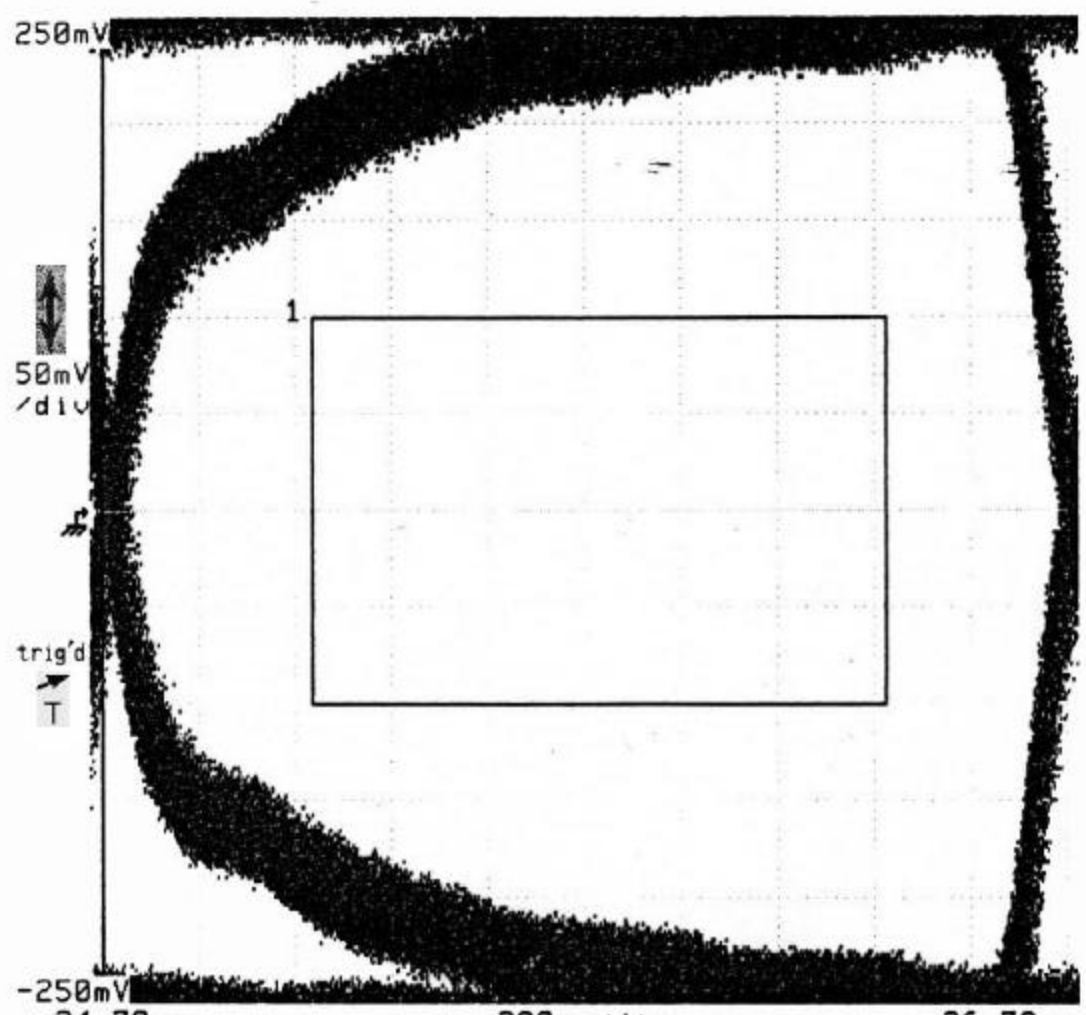
Frequency (MHz)	Actual	1394-1995 Bulk Cable Calculate		Cable Assembly Requirements		1394b #1 Bulk Cable Calculate		Actual
		(max)	(nom)	1394-1995	1394b	(max)	(nom)	
100	1.3	2.0	1.8	2.3	2.3	1.9	2.1	1.5
200	1.8	2.8	2.5	3.2	2.3	2.5	2.8	1.9
400	2.7	3.9	3.6	5.8	2.3	3.0	3.3	2.6
800	5.0	----	----	N/A	TBD	4.1	4.5	4.2
1600	8.6	----	----	N/A	TBD	5.9	6.5	6.9

Note # 1: 1394b construction utilizing expanded PTFE dielectric.

LAUNCH VOLTAGE 600mVp-p
 DATA RATE 5400
 EYE MASK 200mVp-p
 20;80% WIDTH.

11801B DIGITAL SAMPLING OSCILLOSCOPE
 date: 5-JAN-98 time: 4:46:16

Tek ← L Cursors Window FFTmag Def.Tra



24.78ns		200ps/div		26.78ns	
Total	0	Mask3	Mask7	200ps/div	
Wfms	910	Mask4	Mask8		
Mask1	0	Mask5	Mask9	24.76ns	
Mask2		Mask6	Mask10		
Persist/Histograms	Mask	Color Grad	Standard	Remove/Cln	
Continuous	Testing	Scale	Masks	Trace 3	
	Count Off		User Mask	M1-M2	
				Main	

11801B DIGITAL SAMPLING OSCILLOSCOPE
 date: 5-JAN-98 time: 4:33:46

S800

Tek

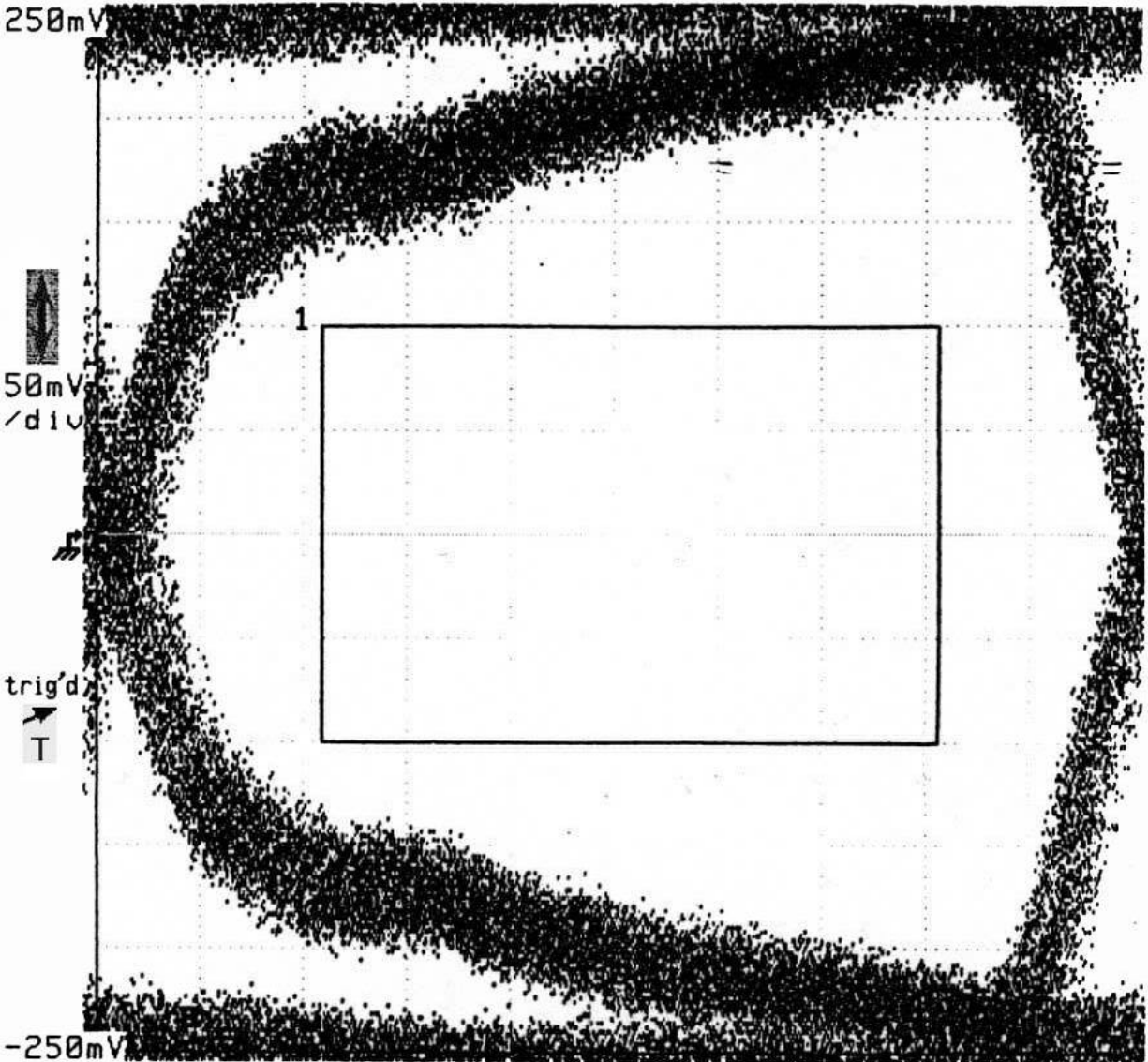


Cursors

Window

EB7mod

Def Tra



Total		0	Mask3	Mask7	Main Size
Wfms		449	Mask4	Mask8	100ps/div
Mask1		0	Mask5	Mask9	Main Pos
Mask2			Mask6	Mask10	23.235ns
Persist/ Histograms	Mask Testing	Color Grad Scale	Standard Masks	Remove/Cir Trace 3	
Color Grad Continuous	Count Off		User Mask	M1-M2 Main	

