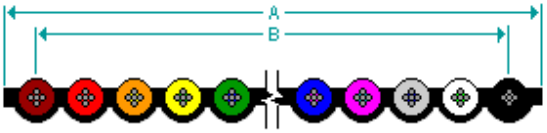
Detailed Specifications & Technical Data

ENGLISH MEASUREMENT VERSION

8R28025 Flat - Rainbow 8R280XX Series



For more Information please call

1-800-Belden1

Call
Customer Service
1-800-BELDEN1

Description:

Belden^s .050" pitch, color-coded FEP flat cable allows for quick identification and circuit tracing, along with easy breakouts for circuit routing, and is designed for mass-termination with standard IDC connectors.

Physical Characteristics (Overall)

Conductor

AWG:

# Conductors	AWG	Stranding	Conductor Material
25	28	7x36	SPC - Silver Plated Copper

Conductor Spacing Center to Center:	.050 +/- .005
Conductor Spacing Outside Center to Outside Center:	1.20 +/- .011

Insulation

Insulation Material:

Insulation Material	Wall Thickness (in.)
FEP - Fluorinated Ethylene Propylene	.010

Substrate Thickness and Material:	.010" Clear FEP
Insulation Resistance:	>100, 000 Mega Ohms

Insulation Color Code Chart:

Number	Color
1	Brown
2	Red
3	Orange
4	Yellow
5	Green
6	Blue
7	Purple
8	Gray
9	White
10	Black
Over 10 conductors	Repeat as required

Outer Shield

Outer Shield Material:

Outer Shield Material
Unshielded

Overall Cable

Overall Nominal Thickness:	.042 +/- .003
Overall Nominal Width:	1.25

Mechanical Characteristics (Overall)

Operating Temperature Range:	-70°C To +150°C

Applicable Specifications and Agency Compliance (Overall)

Applicable Standards & Environmental Programs

UL AWM Style:	20468
UL Rating:	150°C, 150 V, VW-1
EU CE Mark:	Yes
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2002/95/EC (RoHS):	Yes
EU RoHS Compliance Date (mm/dd/yyyy):	07/01/2005
EU Directive 2002/96/EC (WEEE):	Yes
EU Directive 2003/11/EC (BFR):	Yes
CA Prop 65 (CJ for Wire & Cable):	Yes
MII Order #39 (China RoHS):	Yes

Flame Test

UL Flame Test:	VW-1
IEEE Flame Test:	383 (70, 000 BTU)

Plenum/Non-Plenum

Plenum (Y/N):	No

Electrical Characteristics (Overall)

Nom. Characteristic Impedance:

Description	Impedance (Ohm)
(GS)	170
(GSG)	120

Nom. Inductance:

Description	Inductance (µH/ft)
@ 1 MHz (GS)	.26
@ 1 MHz (GSG)	.18

Nom. Capacitance Conductor to Conductor:

Description	Capacitance (pF/ft)
@ 1 kHz (GS)	7.5
@ 1 kHz (GSG)	10.5
@ 1 MHz (GS)	7.5
@ 1 MHz (GSG)	10.5

Nominal Velocity of Propagation:

Description	VP (%)
	78

Nominal Delay:

Delay (ns/ft)
1.30 NS/FT. (GSG)

Nom. Conductor DC Resistance:

DCR @ 20°C (Ohm/1000 ft)
68.2 OHMS/1000 FT. MAX.

Nom. Attenuation:

Freq. (MHz)	Attenuation (dB/100 ft.)
10	1.7
20	2.7
30	3.6

40	4.4
50	5.1
60	5.8
70	6.5
80	7.2
90	8
100	8.5

Max. Operating Voltage - UL:

Voltage
150 V RMS

Max. Recommended Current:

Current
1 Amp per conductor @ 20°C

Dielectric Withstand Voltage: 2, 000 V RMS

Typical Unbalanced Crosstalk:

Description	Pulse Rise Time (NS) (MHz)	Near End % (MHz)	Far End % (MHz)
10 ft. sample length	3	3.8	4.3
10 ft. sample length	5	3.2	2.4
10 ft. sample length	7	3.2	1.4

Notes (Overall)

Notes: GS=Ground-Signal Mode; GSG=Ground-Signal-Ground Mode

Related Documents:

No related documents are available for this product

Put Ups and Colors:

Item #	Putup	Ship Weight	Color	Notes	Item Desc

Revision Number: 1 Revision Date: 12-11-2008

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