

Product: [88240](#) 

53 Ohm, RG58, 20 AWG, CMP



Product Description

RG-58/U type, 20 AWG solid .033" bare copper conductor, plenum, FEP Teflon® insulation, tinned copper braid shield (95% coverage), FEP Teflon® jacket.

Technical Specifications

Physical Characteristics (Overall)

Conductor

AWG	Stranding	Material	Nominal Diameter	No. of Coax
20	Solid	BC - Bare Copper	0.032 in	1

Conductor Count: 1

Insulation

Material	Material Trade Name	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	Teflon®	0.107 in

Outer Shield Material

Type	Material	Coverage [%]
Braid	TC - Tinned Copper	95 %

Outer Jacket Material

Material	Material Trade Name	Nominal Diameter
FEP - Fluorinated Ethylene Propylene	Teflon®	0.159 in

Electrical Characteristics

Conductor DCR

Nominal Conductor DCR	Nominal Outer Shield DCR	Outer Conductor DCR
10.2 Ohm/1000ft	6.7 Ohm/1000ft	6.7 Ohm/1000ft

Capacitance

Nom. Capacitance Conductor to Shield
26.4 pF/ft

Inductance

Nominal Inductance
0.088 µH/ft

Impedance

Nominal Characteristic Impedance
53 Ohm

High Frequency (Nominal/Typical)

Frequency [MHz]	Nom. Insertion Loss
1 MHz	0.5 dB/100ft
10 MHz	1.2 dB/100ft
50 MHz	3 dB/100ft

100 MHz	4.3 dB/100ft
200 MHz	6.4 dB/100ft
400 MHz	9.7 dB/100ft
700 MHz	13.7 dB/100ft
900 MHz	16.1 dB/100ft
1000 MHz	17.3 dB/100ft

Delay

Nominal Delay	Nominal Velocity of Propagation (VP) [%]
1.48 ns/ft	69.5 %

Power Rating

Frequency [MHz]	Max. Power Rating [W]	Nominal Power Rating [W]
1 MHz	4,798.7 W	4,798.7 W
10 MHz	1,937.2 W	1,937.2 W
50 MHz	782.4 W	782.4 W
100 MHz	542.2 W	542.2 W
200 MHz	370.3 W	370.3 W
400 MHz	248.5 W	248.5 W
700 MHz	177.7 W	177.7 W
900 MHz	153.0 W	153 W
1,000 MHz	143.2 W	143.2 W

Voltage

Non-UL Voltage Rating	UL Voltage Rating
1400 V RMS	300 V RMS

Temperature Range

UL Temp Rating:	200°C
Operating Temp Range:	-70°C To +200°C

Mechanical Characteristics

Bulk Cable Weight:	24 lbs/1000ft
Max Recommended Pulling Tension:	47 lbs
Min Bend Radius/Minor Axis:	1.5 in

Standards

NEC/(UL) Specification:	CMP
CEC/C(UL) Specification:	CMP
RG Type:	58/U Type

Applicable Environmental and Other Programs

Environmental Space:	Outdoor - Aerial
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/96/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2005-04-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Aerial:	Yes - When supported by messenger wire
Suitability - Burial:	No
Suitability - Hazardous Locations:	No
Suitability - Indoor:	Yes
Suitability - Outdoor:	Yes
Suitability - Sunlight Resistance:	No

Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6
UL voltage rating:	300 V RMS

Plenum/Non-Plenum

Plenum (Y/N):	Yes
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Part Number

Non-Plenum Number:	8240
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Variants

Item #	Color	Putup Type	Length	UPC
88240 010500	Black	Reel	500 ft	612825434870
88240 0101000	Black	Reel	1,000 ft	612825216919
88240 010Z1000	Black	ReelTuff Box	1,000 ft	612825216926

Footnote:	C - CRATE REEL PUT-UP.
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Product Notes

Notes:	Teflon« is a registered trademark of E. I. duPont de Nemours and Co. used under license by Belden, Inc.
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History

Update and Revision:	Revision Number: 0.286 Revision Date: 04-28-2020
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