

Product: [82240](#) 

53 Ohm, RG58, 20 AWG, CMP



Product Description

RG-58/U type, 20 AWG solid .032" bare copper conductor, plenum, FEP Teflon® insulation, tinned copper braid shield (95% coverage), Flamarrest® 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	Tinned Copper (TC)	95%

Outer Jacket Material		
Material	Material Trade Name	Nominal Diameter
PVC - Polyvinyl Chloride	Flamarrest®	0.159 in

Electrical Characteristics

Conductor DCR				
Nominal Conductor DCR	Nominal Conductor DCR	Conductor Resistance	Nominal Outer Shield DCR	Outer Conductor DCR
10.2 Ohm/1000ft	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	
0.07 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]	Nominal Power Rating [W]
1 MHz	4,798.7 W
10 MHz	1,937.2 W
50 MHz	782.4 W
100 MHz	542.2 W
200 MHz	370.3 W
400 MHz	248.5 W
700 MHz	177.7 W
900 MHz	153 W
1,000 MHz	143.2 W

Voltage

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

Temperature Range

UL Temp Rating:	75°C
Operating Temp Range:	0°C To +75°C

Mechanical Characteristics

Bulk Cable Weight:	24 lbs/1000ft
Max. Pull Tension:	47 lbs
Min Bend Radius/Minor Axis:	1.75 in

Standards

NEC/(UL) Compliance:	CMP
CEC/C(UL) Compliance:	CMP
CPR Euroclass:	Eca
RG Type:	58/U Type

Applicable Environmental and Other Programs

Environmental Space:	Indoor - Plenum
EU Directive 2000/53/EC (ELV):	Yes
EU Directive 2003/11/EC (BFR):	Yes
EU Directive 2011/65/EU (ROHS II):	Yes
EU Directive 2012/19/EU (WEEE):	Yes
EU Directive 2015/863/EU:	Yes
EU Directive Compliance:	EU Directive 2003/11/EC (BFR)
EU CE Mark:	No
EU RoHS Compliance Date (yyyy-mm-dd):	2005-10-01
MII Order #39 (China RoHS):	Yes

Suitability

Suitability - Indoor:	Yes
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Flammability, LS0H, Toxicity Testing

UL Flammability:	NFPA 262
CSA Flammability:	FT6

IEC Flammability:	IEC 60332-1-2
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
82240 010U500	Black	UnReel	500 ft	612825434832
82240 010Z500	Black	ReelTuff Box	500 ft	612825196440
82240 010Z1000	Black	ReelTuff Box	1,000 ft	612825434757
82240 877U500	Natural	UnReel	500 ft	612825434849
82240 877I1000	Natural	Reel	1,000 ft	612825196426
82240 877U1000	Natural	UnReel	1,000 ft	612825196433
82240 877Z1000	Natural	ReelTuff Box	1,000 ft	612825196471

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: 0.271 Revision Date: 04-28-2020
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