

# QMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240, PE-C240



### RF Connectors Technical Data Sheet

EZ-240-QM-RA-X

### Configuration

- QMA Male Connector
- •50 Ohms
- Right Angle Body Geometry

### Features

- Max. Operating Frequency 6 GHz
- Good VSWR of 1.3:1

- Connector Interface Types: LMR-240, PE-C240, LMR-240-UF
- Gold Plated Beryllium Copper Contact
- •50 µ inches minimum contact plating

### **Applications**

General Purpose Test

Custom Cable Assemblies

### Description

Times Microwave's EZ-240-QM-RA-X QMA male right angle connector offered by Pasternack with crimp/non-solder contact attachment for Times' LMR-240, PE-C240 and LMR-240-UF is part of our full line of RF components available for same-day shipping. Times Microwave's QMA male connector operates up to a maximum frequency of 6 GHz and offers good VSWR of 1.3:1. Its right angle body geometry allows for easier connections in tight spaces.

Times Microwave's QMA male right angle connector EZ-240-QM-RA-X datasheet specifications and drawing with dimensions are shown below in this PDF. Pasternack's broad catalog of RF, microwave and millimeter wave connectors allows designers to configure and customize their signal connections however they like. Whether the need is to provide an I/O for a board design, or simply create a custom cable assembly configuration, Pasternack has the right connector for the job. Pasternack can also expertly build your custom cable assemblies for you and ship same-day.

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		6	GHz
VSWR			1.3:1	
Insertion Loss			0.25	dB
Dielectric Withstanding Voltage (DC)			1,000	Vdc
Insulation Resistance	5,000			MOhms

### **Mechanical Specifications**

 Weight
 0.027 lbs [12.25 g]

 Mating Cycles
 100 Cycles

 Cable Retention Force
 250 lbs [113.4 kg]

Click the following link (or enter part number in "SEARCH" on website) to obtain additional part information including price, inventory and certifications: QMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240, PE-C240 EZ-240-QM-RA-X

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### RF Connectors Technical Data Sheet

EZ-240-QM-RA-X

#### **Material Specifications**

Description	Material	Plating
Contact	Beryllium Copper	Gold 50 μ inches minimum
Insulation	PTFE	
Outer Conductor	Brass	Tri-Metal 80 μ inches minimum
Body	Brass	Tri-Metal 80 μ inches minimum

### **Environmental Specifications**

**Temperature** 

Operating Range

Shock Vibration Altitude -40 to +125 deg C

MIL-STD 202G, Meth, 107, Cond.B MIL-STD 202G, Meth, 204, Cond.D

MIL-STD 202G, Meth, 213, Cond.I

Compliance Certifications (see product page for current document)

### **Plotted and Other Data**

Notes:

QMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240, PE-C240 from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/gma-male-lmr-240-pe-c240-connector-ez-240-qm-ra-x-p.aspx

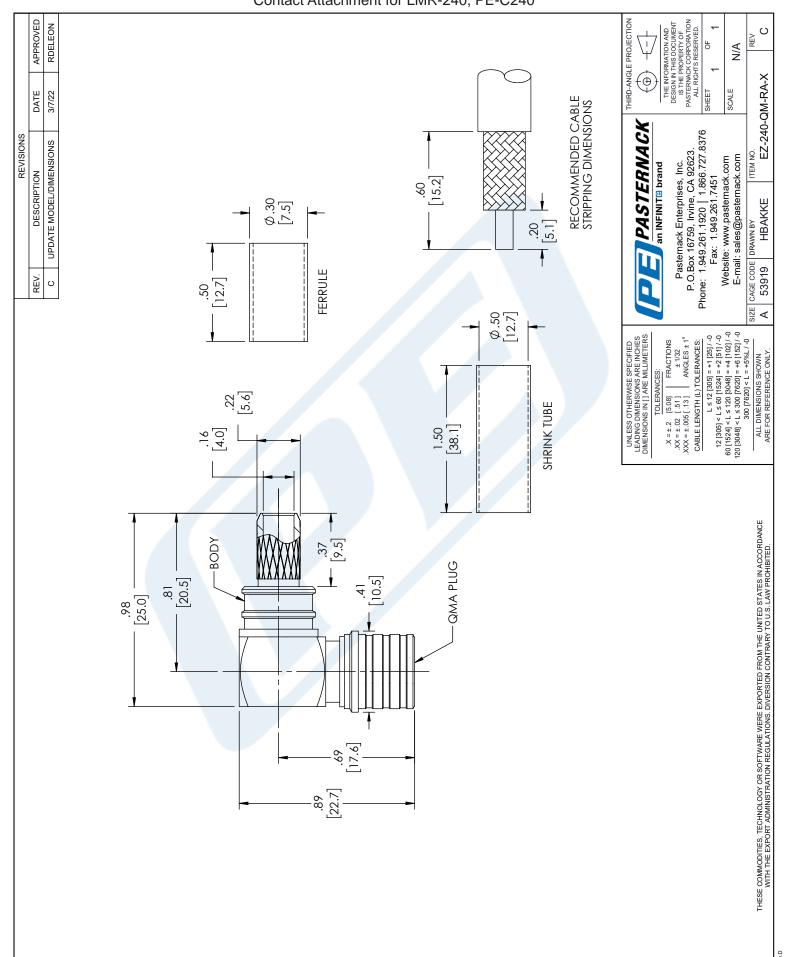
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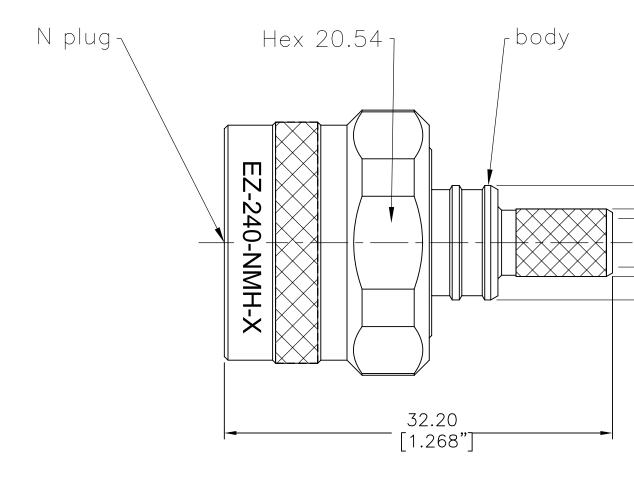
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### EZ-240-QM-RA-X CAD Drawing

QMA Male Right Angle Connector Crimp/Non-Solder Contact Attachment for LMR-240, PE-C240



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### I. MATERIALS & FINISHES

Components Body	<b>Materials</b> Brass	<b>Finishes</b> Albaloy	<b>Thk. (μ")</b> 80
Center Cont.	QBe2	Gold	50
Ferrule	Brass	Albaloy	80
Nut	Brass	Albaloy	80
Insulator	PTFE		
Gaskt	Silicone		

### **III. ENVIRONMENT PROPERTIES**

Temperature Range: -40°c~+125°c

Thermal Shock: MIL-STD 202G, Meth.107, Cond.B Vibration: MIL-STD 202G, Meth.204, Cond.B Shock: MIL-STD 202G, Meth.213, Cond I

Climatic Class: IEC 60068 55/155/56

(2002/95/EC)RoHS: Compliant

### **V. TOOLING**

Stripping Tool: 3192-152/CST-240A Crimping Tool: 3190-667/CT-240/200/100

### II. ELECTRICAL PROPERTIES

 $\begin{array}{lll} \textbf{Impedance ($\alpha$):} & 50 \\ \textbf{Frequency Range (GHz):} & DC to 6 \ GHz \\ \textbf{Working Voltage ($V$):} & 2500 \\ \textbf{Insulation Resistance ($M$\Omega$):} & $\geq$10000 \\ \textbf{VSWR:} & $\leq$1.30 \\ \textbf{Insertion Loss(dB, f/GHz):} & -0.1x \ \sqrt{f} \\ \end{array}$ 

### **IV. MECHANICAL PROPERTIES**

Center Cont.: Finger Contact

Outer Cont.: Crimp
Coupling Nut Torque (N.m): 1.7
Cbl-Connector Retention Force (N): 250
Durability (cycles): 500



### Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



### **LMR-240-UF**

### **Times Microwave Systems Coax Cable Specification**

### Configuration

- · Low Loss, Indoor / Outdoor Flexible Cable
- 2 Shield(s)

#### **Features**

- · Highly Flexible
- Low Loss Cable

### **Applications**

- Jumper Assemblies
- Short Antenna Feeder Runs

- RF Shielding > 90dB
- · Designed for Indoor/Outdoor Use
- · Wireless Communications

### **Description**

Pasternack's LMR series RF cables from Times Microwave offer an ideal solution for applications where flexibility is essential. These flexible cables provide low loss with a minimum bend radius of 0.75 in. for installation. The stranded center conductor and rubber jacket also make this RF cable ideal for applications requiring periodic or repeated flexing. Pasternack's LMR-240-UF cable is designed for use in indoor and outdoor applications. The LMR-240-UF's thermoplastic elastomer (TPE) jacket gives this RF cable a life expectancy of 10 years. This low loss RF cable is also double shielded to provide greater than 90 dB RF shielding.

### **Electrical Specifications**

Description	Minimum	Typical	Maximum	Units
Frequency Range	DC		5.8	GHz
Impedance		50		Ohms
Velocity of Propagation		84		%
Time Delay		1.21 [3.97]		ns/ft [ns/m]
Shielding Effectiveness	90			dB
Dielectric Withstanding Voltage (DC)			1,500	Vdc
Jacket Spark			5,000	Vrms
Inner Conductor DC Resistance			4.28	Ohms/1000ft
Outer Conductor DC Resistance			3.89	Ohms/1000ft
Nominal Capacitance		24.2 [79.4]		pF/ft [pF/m]
Nominal Inductance		0.06 [0.2]		uH/ft [uH/m]
Input Power (Peak)			5.6	kWatts

### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Frequency	50	150	220	450	900	MHz



## Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



### **LMR-240-UF**

### Performance by Frequency Band

Description	F1	F2	F3	F4	F5	Units
Attenuation, Typ	2.1	3.6	4.4	6.3	9.1	dB/100ft
	6.89	11.81	14.44	20.67	29.86	dB/100m
Input Power (CW), Max	960	550	450	310	220	Watts

Description	F6	F7	F8	F9	F10	Units
Frequency	1.5	1.8	2	2.5	5.8	GHz
Attenuation, Typ	11.8	13	13.8	15.5	24.4	dB/100ft
	38.71	42.65	45.28	50.85	80.05	dB/100m
Input Power (CW), Max	170	150	140	130	80	Watts

**Electrical Specification Notes:** 

Values at 25°C, sea level.//Attenuation = 0.290501\*sqrt(FMHz) + 0.000396

### **Mechanical Specifications**

 Diameter
 0.24 in [6.1 mm]

 Weight
 0.032 lbs/ft [0.05 kg/m]

 Min. Bend Radius (Installation)
 0.75 in [19.05 mm]

 Min. Bend Radius (Repeated)
 2.5 in [63.5 mm]

 Min. Bend Radius (Repeated)
 2.5 in [63.5 mm]

 Bending Moment
 0.13 lbs-ft [0.18 N-m]

 Tensile Strength
 80 lbs [36.29 kg]

 Flat Plate Crush
 13 lbs/in [0.23 kg/mm]

### **Construction Specifications**

Description	Material and Plating	Diameter
Inner Conductor	Copper, Strand	0.056 in [1.42 mm]
Conductor Type	Stranded	
Dielectric	PE (F)	0.15 in [3.81 mm]
First Shield	Aluminum Tape	0.155 in [3.94 mm]
Second Shield	Tinned Copper Braid	0.178 in [4.52 mm]
Outer Conductor		0 in [0 mm]
Jacket	TPE, Black	0.24 in [6.1 mm]

### **Environmental Specifications**

**Temperature** 

Operating Range -40 to +85 deg C Installation Range -40 to +85 deg C Storage Range -70 to +85 deg C

Environmental Specification Notes: Designed for indoor and outdoor use.



### Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket



### **LMR-240-UF**

Compliance Certifications (see product page for current document)

#### **Plotted and Other Data**

Notes:

Flexible LMR-240-UF Indoor / Outdoor Rated Coax Cable Double Shielded with Black TPE Jacket from Pasternack Enterprises has same day shipment for domestic and International orders. Our RF, microwave and millimeter wave products maintain a 99.4% availability and are part of the broadest selection in the industry.

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URL: https://www.pasternack.com/50-ohm-ultra-flexible-Imr-240-uf-pe-jacket-tinned-copper-over-aluminum-tape-outer-conductor-double-shielded-Imr-240-uf-p.aspx

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