

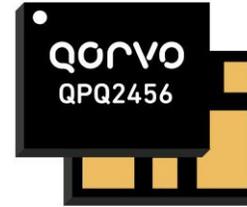
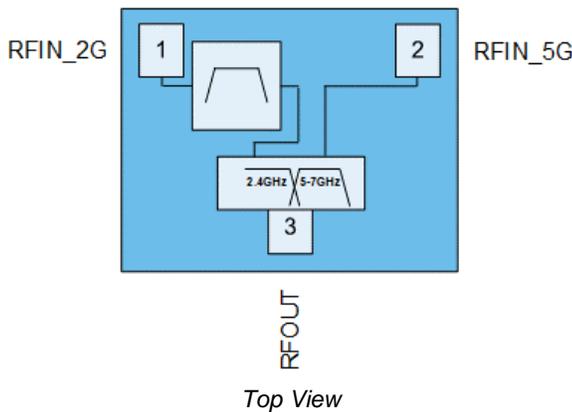
### Product Overview

The Qorvo® QPQ2456 is a high-performance, high power, BAWplexer which takes advantage of Qorvo’s edgeBoost technologies to deliver extremely steep skirts, simultaneously exhibiting low loss in the Wi-Fi bands and high near-in rejection to meet regulatory restricted band emissions, to a diplexer that has a low loss bandpass covering UNII1-8 Wi-Fi channels (5150-7125MHz.)

The BAWplexer enables single antenna implementation combining both 2.4 GHz and 5-7 GHz Wi-Fi applications. The 2.4 GHz path integrates a BAW filter to enable longer range of Wi-Fi and an increase in network capacity. The 5-7 GHz path is a low-loss bandpass incorporating the expanded spectrum including all Wi-Fi channels in the UNII1-8 bands. The diplexer is designed for thermally challenging environment and exhibits excellent power handling capabilities.

Using advanced laminate module packaging techniques to achieve high integration in an industry leading compact footprint. The QPQ2456 negates the challenges of matching the filter to the diplexer helping end customers achieve a faster time to market

### Functional Block Diagram



4 Pad 1.9 x 1.5 mm Laminate Package

### Key Features

- 2402-2472 MHz & 5150-7125 MHz
- Integrated 2.4GHz Rejection that enables higher regulatory powers for Wi-Fi CH1 and CH11
- Wide passband that incorporates all Wi-Fi 6 channels in UNII1-8
- Low insertion loss in both passbands
- Extended temperature performance from -20 to +95 °C
- High power handling to +28dBm averaged Input Power

### Applications

- Access Points
- Wireless Routers
- Residential Gateways
- Customer Premise Equipment
- Internet of Things

### Ordering Information

Part Number	Description
QPQ2456SB	Sample bag with 5 pieces
QPQ2456SR	7" reel with 100 pieces
QPQ2456TR13	13" reel with 10,000 pieces
QPQ2456EVB-01	Assembled Evaluation Board

## Handling Precautions

Parameter	Rating	Standard
ESD – Human Body Model (HBM)	Class 1B (500V)	ANSI/ESD/JEDEC JS-001
ESD – Charged Device Model (CDM)	Class C3 (1000V)	ANSI/ESD/JEDEC JS-002
MSL – Moisture Sensitivity Level	MSL 3	IPC/JEDEC J-STD-020



Caution!  
ESD sensitive device

## Solderability

Compatible with both lead-free (260 °C max. reflow temperature) and tin/lead (245 °C max. reflow temperature) soldering processes.

Package lead plating: Electroless Ni/Electroless Pd/Immersion Au (ENEPIG)

## RoHS Compliance

This part is compliant with the 2011/65/EU RoHS directive (Restrictions on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment), as amended by Directive 2015/863/EU.

This product also has the following attributes:

- Lead free
- Halogen Free (Chlorine, Bromine)
- Antimony Free
- TBBP-A (C<sub>15</sub>H<sub>12</sub>Br<sub>4</sub>O<sub>2</sub>) Free
- SVHC Free



## Contact Information

For the latest specifications, additional product information, worldwide sales and distribution locations:

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