tyco Electronics

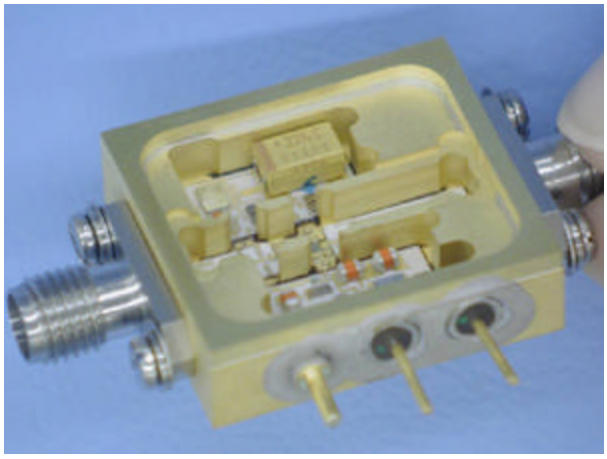
MACOM

X → Ka Band, Connectorised Tripler: 9 – 11 GHz → 27 – 33 GHz

MAAMML0020
V4

Features

- High Reliability
- Weight and space saving design
- Field Replaceable K Connectors
- Built-in Band Pass Filter
- Built-in output amplifier
- Built-in power supply protection
- Space Qualified version available



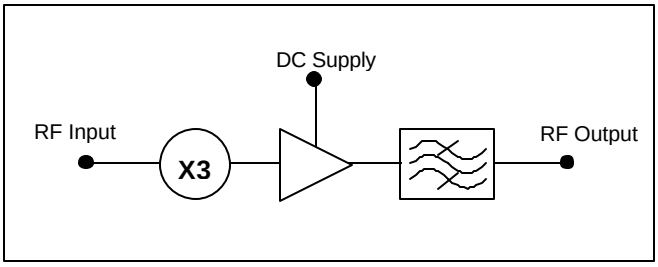
Description

The MAAMML0020 is a high reliability X → Ka band tripler. This weight and space saving design has been realised by utilising the latest advances in housing materials. The unit consists of a tripler followed by a Ka band amplifier and band pass filter (BPF.) The amplifier restores output signal strength. The BPF reduces out of band products.

Additionally, built-in circuitry ensures that power supply sequencing can be any order, for both power-up and power-down.

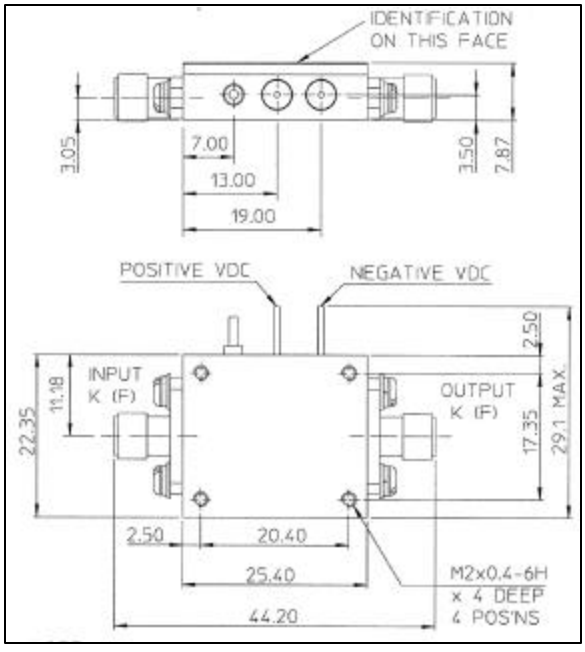
Alternative frequency ranges, gain, output powers and supply rail configurations are available. The MAAMML0020 is also available as a space qualified version. Please contact the factory for details.

Functional Block Diagram



Mechanical

This device is supplied with field replaceable 'K' connectors. It is hermetically sealed, with a gold-plated finish to MIL-G-45204.



- **North America** Tel: 800.366.2266 / Fax: 978.366.2266
- **Europe** Tel: 44.1908.574.200 / Fax: 44.1908.574.300
- **Asia/Pacific** Tel: 81.44.844.8296 / Fax: 81.44.844.8298

Visit www.macom.com for additional data sheets and product information.

Specification at +25 °C

(Applies over the frequency range @ +25 °C, output and input load impedance of 50 ohms. Unless otherwise stated limits & conditions are indicated values.)

Parameter	Value	Units
Input Frequency	9-11	GHz
Output Frequency	27-33	GHz
Operating Temperature T_{OP}	+0 ~ +50	°C
Input power range	+13 ~ +18	dBm
Conversion gain (nominal)	+3	dB
Passband flatness	6	dB pk-pk
Spurious	-65	dBc
Harmonics	-20	dBc
Input VSWR	2.5:1	Ratio
Output VSWR	2:1	Ratio
DC Supply Positive Rail		
Supply Voltage	+7	V
Current consumption	350	mA
DC Supply Negative Rail		
Supply Voltage	-6.5	V
Current consumption	10	mA

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