

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

**MAAMML0020  
V4**

**Features**

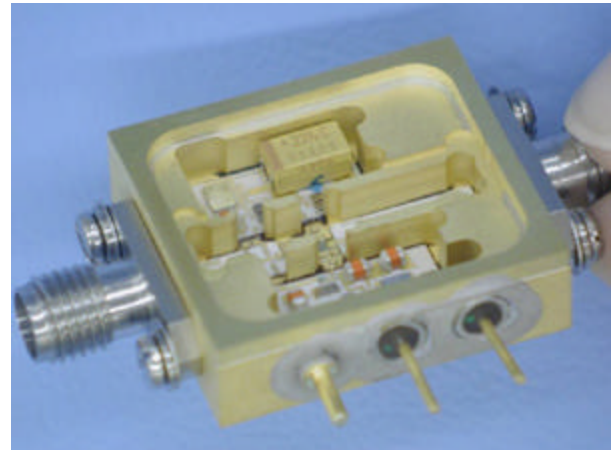
- High Reliability
- Weight and space saving design
- Field Replaceable K Connectors
- Built-in Band Pass Filter
- Built-in output amplifier
- Built-in power supply protection
- Space Qualified version available

**Description**

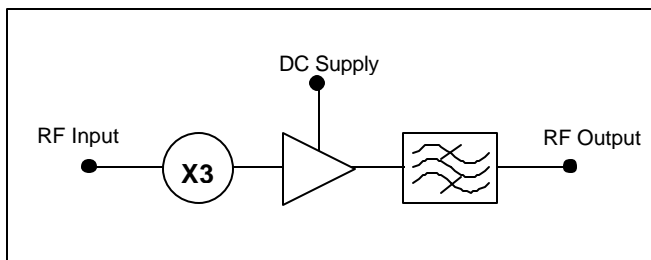
The MAAMML0020 is a high reliability X → Ka band tripler. This weight and space saving design has been realised by utilising the latest advances in housing materials. The unit consists of a tripler followed by a Ka band amplifier and band pass filter (BPF.) The amplifier restores output signal strength.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

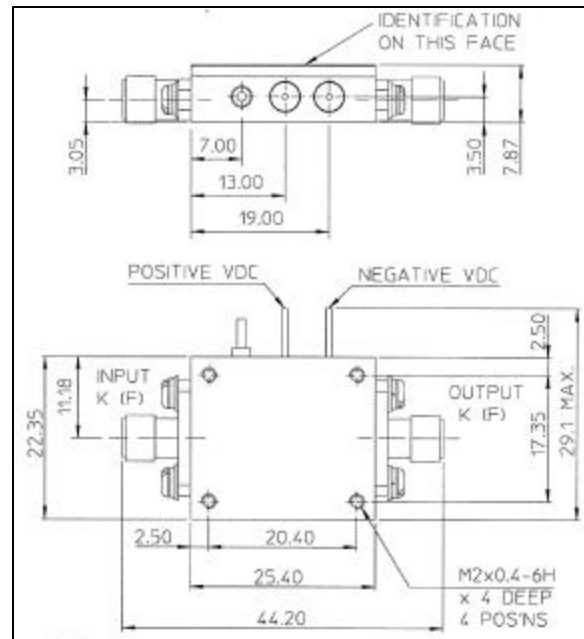


**Functional Block Diagram**



**Mechanical**

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



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**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 <sub>OP</sub>	+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
<i>DC Supply Positive Rail</i>		
Supply Voltage	+7	V
Current consumption	350	mA
<i>DC Supply Negative Rail</i>		
Supply Voltage	-6.5	V
Current consumption	10	mA