

Description

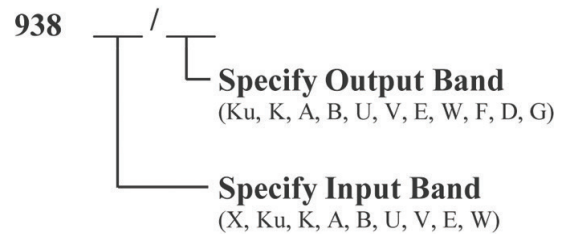
Mi-Wave's 938 Series Frequency Multipliers offer broad-band, high efficiency designs that can be used to generate millimeter wave frequencies from lower frequency microwave sources. The passive designs use GaAs varactor diodes mounted on a finline design provides for minimal circuit losses and optimal harmonic generation. An SMA female input connector is available up to an input frequency of 50 GHz.

- Operation thru 140 GHz
- X2, X3, X4, X6 Multiplication
- High Efficiency
- 10° Percent to 100 Percent Bandwidths

X2, X3, and most X4 multipliers use only a single multiplier stage. The 938 Series Multipliers are designed for input power levels from 30 mW to 100 mW. The multipliers are optimized for specific power levels in this range for an input dynamic range of 3 to 4 dB. These units are used for LO sources, frequency extension of synthesizers, and CW transmitters. Options such as isolators and filters can be supplied for many specialized applications.

Operating Specifications	
Input VSWR (Typ.)	2:1
Harmonic Rejection	-20 dBc
Operating Temperature	0 to +50 C
Storage Temperature	-10 C to +60 C

Ordering Information



Technical Specifications (X2, X3) Passive					
Model Number	938X	938Ku	938K	938A	938B
Frequency Input (GHz)	8.2–12.4	12.4–18.0	18.0–26.5	26.5–40.0	33.0–50.0
Input Flange	SMA	SMA	K	UG-599	UG-599M
Bandwidth (3 dB)	15% to full	15% to full	10% to full	10% to full	10% to 80%
Power Input (mW) ¹	50	40	40	20	20
Power Input (mW) ¹					
X2	100	100	100	100	100
X3	100	100	100	100	100
Output Flange					
X2	UG-595	UG-599	UG-599M	UG-385	UG-387M
X3	UG-599	UG-599M	UG-385	UG-387M	UG-387

1. Maximum levels, specify required input/output levels.

Check with Mi-Wave for current specifications