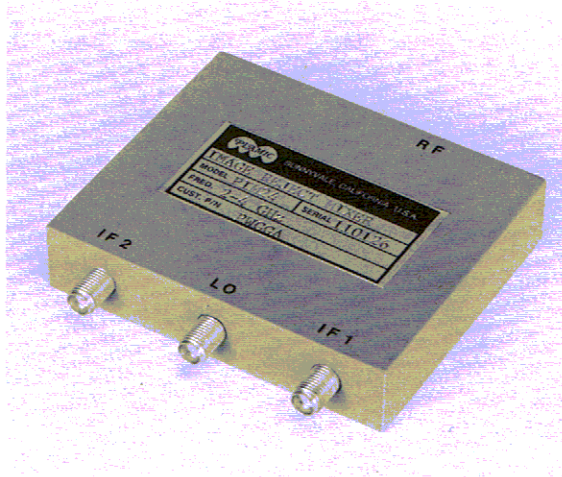




IMAGE REJECT MIXERS

FEATURES

- Small size and weight
- Rugged
- Wide temperature tolerance
- State-of-the-art performance
- High reliability



DESCRIPTION:

PLAMIC Image Reject Mixers are four diode networks which allow discrimination between the I.F. signals produced by R.F. signals above and below the local oscillator frequency. Two I.F. ports are provided for the two I.F. signals. These mixers utilize the latest MIC (Microwave Integrated Circuit) techniques, including thin-film gold conductors and integrated tantalum nitride resistors on alumina substrates, nitride passivated Schottky beamlead diodes and silicon MIS capacitors to optimize performance and reliability. Kovar alloy

substrate carriers provide mechanical integrity over wide temperature variations.

These mixers are available in octave bandwidths in the frequency range of 1 to 26 GHz, and can be furnished with provisions for external d.c. bias for starved L.O. operation. Diodes can be selected for minimum harmonic and intermodulation distortion if sufficient L.O. drive or d.c. bias is available. They can easily be integrated with other microwave components, such as filters, diode switches, oscillators, and amplifiers, to form a single integrated subsystem.

ELECTRICAL SPECIFICATIONS:

Freq. (GHz)	Isolation LO/RF Min/Typ (dB)	VSWR Max/Typ		Conversion Loss Max/Typ (dB)	Image Rejection Min/Typ (dB)	LO Power (dBm)
		RF	Lo			
1.0-2.0	15/20	2.0/1.4	2.5/1.5	8.5/7.0	15/20	+10
1.2-12.4	10/20	2.0/1.5	2.5/1.6	10/7.5	14/18	+13
2.0-4.0	15/20	2.0/1.5	2.5/1.6	8.5/7.0	14/18	+10
3.7-6.4	15/20	2.0/1.5	2.5/1.6	9.0/7.5	15/20	+10
4.0-8.0	15/20	2.0/1.6	2.5/1.7	9.0/7.5	15/20	+10
8.0-12.4	15/20	2.0/1.6	2.5/1.7	9.5/8.0	15/20	+10

PLA MIC MEANS MIC

For further information please contact:

PLANAR MICROWAVE INTERNATIONAL CORPORATION

138 KIFER COURT, SUNNYVALE, CALIFORNIA 94086 (408) 739-3400



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DESCRIPTION:

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lead diodes and silicon MIS capacitors to optimize performance and reliability. Kovar alloy substrate carriers provide mechanical integrity over wide temperature variations.

This millimeter wave mixer covers the 18.0 to 26.5 GHz frequency range.

They can easily be integrated with other microwave components such as filters, diode switches, oscillators, and amplifiers, to form a single integrated subsystem.

ELECTRICAL SPECIFICATIONS:

Model KIRM-2(2) processes 18 to 26.5 GHz signals with a maximum conversion loss of 9.6 dB at an L.O. power of +6 dBm. Image rejection of 20 dB is possible across most of the band. R.F., L.O. and I.F. port VSWR's are less than 2:1 over the band. L.O. to R.F. isolation is typically 15 dB. The common-mode rejection is 35 dB, and the 2 x 2 suppression for a -20 dBm signal is a minimum of 45 dB. (10.16 x 19.05 x 5.33 cm), weighs 1 lb. (4.54 kg) and requires ± 15 V at 2 mA.

PLAMIC MEANS MIC

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