

Series HBM12-X4 & HBM12-X6 E-Band Integrated Mixer/LO Multiplier Modules

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DESCRIPTION

HXI has combined it's high performance WR-12 Balanced Mixer (HBM12) with it's HAFME X4 multipliers and X6 multipliers to provide more compact up and downconverter assemblies for the 71-76 GHz and 81-86 GHz communications bands and the 76-81 GHz automotive radar band.

These integrated modules exhibit the same low conversion loss as the standalone HBM12 mixers and incorporate the same multiplier circuits as our standalone active frequency multipliers. The result is the same great performance, smaller size and a lower price than buying two separate components.



E-Band X4 Frequency Multiplier

Sample Specifications for Integrated Mixer/Multipliers				
Parameter	HBM12X-X4-373	HBM12X-X4-XXX	HBM12X-X4-372	HBM12X-X6-XXX
RF Frequency Range	71-76 GHz	76-81 GHz	81-86 GHz	81-86 GHz
LO Input Frequency*	16.5 GHz	17.75 GHz	19.75 GHz	12.67 GHz
IF Output Frequency*	5-10 GHz	5-10 GHz	5-10 GHz	5-10 GHz
Conversion Loss	6 dB typical	6.5 dB typical	6.5 dB typical	6.5 dB typical
LO Input Level	+12 dBm nominal			
DC Bias	+6 VDC @ 400 mA typical			
* Contact factory for different LO and IF frequency configurations.				

Generic E-Band Radio Block Diagram

