



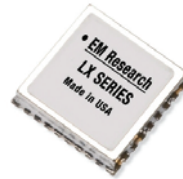
SLX Series



ZLX Series



LX Series



HFS Series



Specification	HFS-88-XX	SLX-137-XX	SLX-406-XX	ZLX-978-XX	ZLX-1048-XX	LX-1090-XX
Freq. Range	30-88 MHz	118-137 MHz	406.037 MHz	978 MHz	1048 MHz	1090 MHz
Step Size	12.5 KHz	25 KHz	Fixed	Fixed	Fixed	Fixed
Stability	Same as Ref	Same as Ref	Same as Ref	Same as Ref	+/- 2.5 ppm	+/- 5 ppm
Reference	10 MHz	10 MHz	12.69 MHz	10 MHz	Internal	Internal
Output Power	+7 dBm	+5 dBm	+0 dBm	+7 dBm	+7 dBm	+7 dBm
Harmonics	-10 dBc	-10 dBc	-10 dBc	-15 dBc	-20 dBc	-15 dBc
Spurious	-60 dBc	-55dBc	-55 dBc	-65 dBc	-70 dBc	-65 dBc
Phase Noise						
@ 10 KHz	-107 dBc/Hz	-90 dBc/Hz	-90 dBc/Hz	-95 dBc/Hz	-95 dBc/Hz	-90 dBc/Hz
@ 100 KHz	-130 dBc/Hz	-110 dBc/Hz	-110 dBc/Hz	-115 dBc/Hz	-120 dBc/Hz	-110 dBc/Hz
Supply Current	+5 VDC <200 mA	+3.3 VDC <30 mA	+3.3 VDC <30 mA	+5 VDC <50 mA	+5 VDC <65 mA	+3.3 VDC <50 mA
Size (in)	1.25 x 1.0 x 0.24	0.5 sq x 0.15	0.5 sq x 0.15	0.6 sq x 0.15	0.6 sq x 0.15	0.75 sq x 0.15
Application	TacComm	AvComm	ELT	ADS-B / UAT	ADS-B / UAT	DME/IFF

Custom frequencies available. All specifications are typical unless otherwise specified and subject to change without notice. Pictures and drawings not to scale.

Features

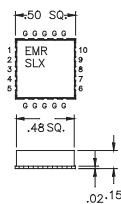
- Universal Serial Programming
- Miniature Packages
- Low Phase Noise
- Low Power Consumption
- High Vibration Tolerance

Options

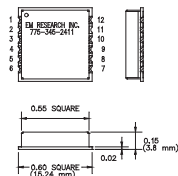
- External references 5 – 125 MHz
- Internal references (except SLX-Series)
- Supply voltages +3.3, +5, +8, +12 VDC
- Step sizes 1 KHz to 10 MHz
- Temperature range -40°C to +85°C

Packages

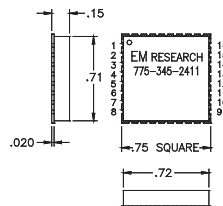
SLX Series



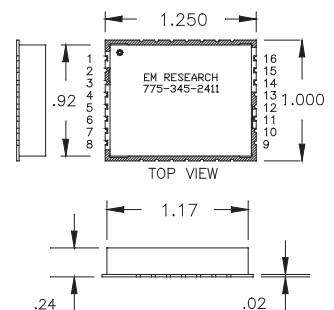
ZLX Series



LX Series



HFS Series



Note: All dimensions are in inches, unless otherwise specified

*Drawing not to scale



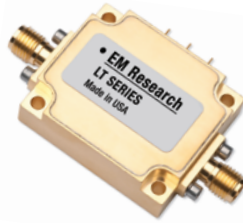
PN Series



HFS Series



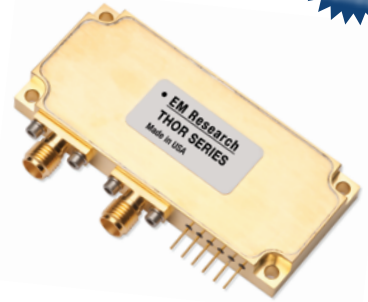
LT Series



SLS Series



THOR Series



Specification	PN-1090-XX	HFS-1215-XX	LT-1090-XX	SLS-1215-XX	PN-4350-XX	THOR-13800-XX
Freq. Range	1030, 1090	960-1215	1090	962-1213	4250-4350	13800
Step Size	Selectable	100 KHz	Fixed	1 MHz	1 MHz	Fixed
Stability	+/- 2.5 ppm	Same as Ref	Same as Ref	+/- 2.5 ppm	Same as Ref	Same as Ref
Reference	Internal	10 MHz	10 MHz	Internal	100 MHz	10 MHz
Output Power	+7 dBm	+7 dBm	+13 dBm	+10 dBm	+7 dBm	+7 dBm
Harmonics	-35 dBc	-15 dBc	-20 dBc	-20 dBc	-20 dBc	-20 dBc
Spurious	-70 dBc	-65 dBc	-70 dBc	-70 dBc	-70 dBc	-70 dBc
Phase Noise						
@ 10 KHz	-95 dBc/Hz	-95 dBc/Hz	-120 dBc/Hz	-105 dBc/Hz	-100 dBc/Hz	-90 dBc/Hz
@ 100 KHz	-115 dBc/Hz	-115 dBc/Hz	-140 dBc/Hz	-125 dBc/Hz	-112 dBc/Hz	-115 dBc/Hz
Supply Current	+5 VDC <85 mA	+5 VDC <160 mA	+8 VDC <175 mA	+12 VDC <185 mA	+5 VDC / +3.3 VDC <150 mA	+5 VDC <250 mA
Size (in)	0.9 sq x 0.14	1.25 x 1.0 x 0.24	1.3 x 1.1 x 0.4	1.5 x 1.5 x 0.6	0.9 sq x 0.15	2.5 x 1.1 x 0.4
Application	TCAS	TACAN	TCAS	DME	Radar Altimeter	Radar Altimeter

Custom frequencies available. All specifications are typical unless otherwise specified and subject to change without notice. Pictures and drawings not to scale.

Features

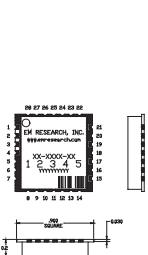
- Universal Serial Programming
- Miniature Packages
- Low Phase Noise
- Low Power Consumption
- High Vibration Tolerance

Options

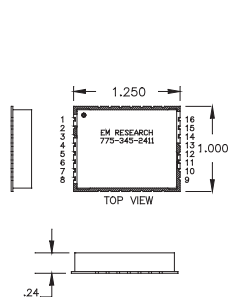
- External references 5 – 125 MHz
- Internal references (except SLX-Series)
- Supply voltages +3.3, +5, +8, +12 VDC
- Step sizes 1 KHz to 10 MHz
- Temperature range -40°C to +85°C
- Hermetic sealing on LT Series, THOR Series

Packages

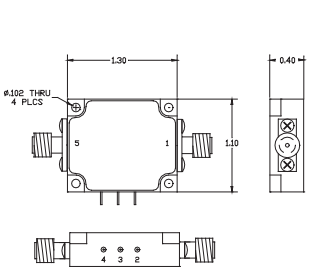
PN Series



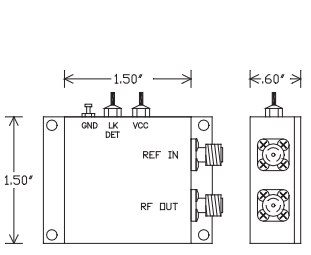
HFS Series



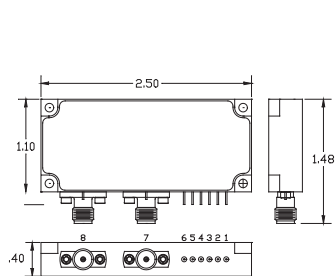
LT Series



SLS Series



THOR Series



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For ordering information, please contact EM Research, Inc. • 1301 Corporate Blvd., Reno, Nevada 89502 • P: (775) 345-2411 • F: (775) 345-1030 • sales@emresearch.com