

Fixed Magnitude Mismatch

Electronic Line Stretcher

ELS-1300

750 to 1300 MHz

Maximum Ratings

Operating Temperature	0°C to 50°C
Storage Temperature	-40°C to 100°C
RF Input Power	13 dBm
Control Voltage	0.5V to 30V

Pin Configuration

RF IN	1
MONITOR OUT	2
CONTROL	3

Features

- over 360° phase shift of the reflected signal
- normalized and stable magnitude of the reflected signal
- voltage controlled for automated applications
- protected under US Patent No. 6,479,977



CASE STYLE: K18
CONNECTOR: SMA FEMALE
PRICE: \$149.95 ea.
QTY.: (1-9)

Applications

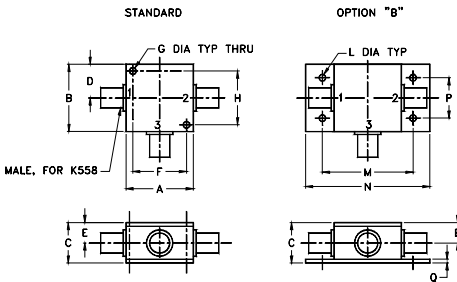
- automated load-pull measurement of oscillators¹

Electrical Specifications

FREQUENCY RANGE (MHz) f_L - f_U	INPUT POWER (dBm) Max.	PHASE RANGE (Degrees)		RETURN LOSS (dB) Typ.	CONTROL VOLTAGE (V)
		Min.	Max.		
750-1300	10	360		10-12	1-25

1. "Line Stretchers Ease VCO Load-Pull Testing" *Microwaves & RF*, pg 107&108, July 2000

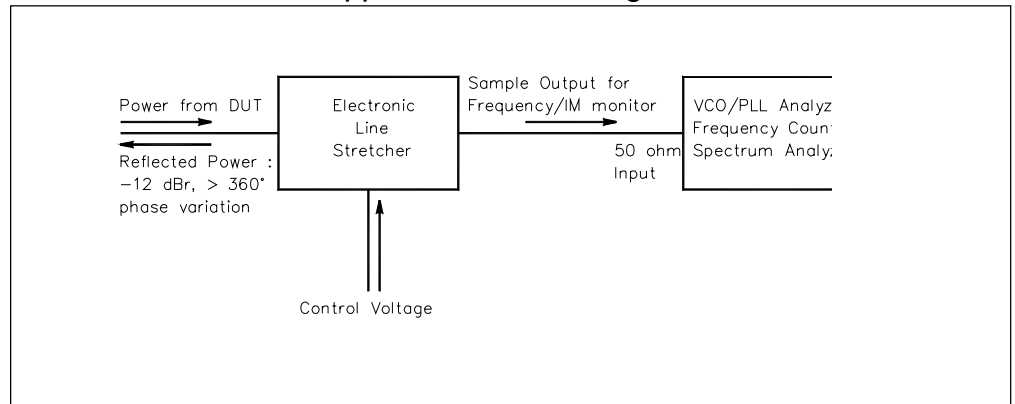
Outline Drawing



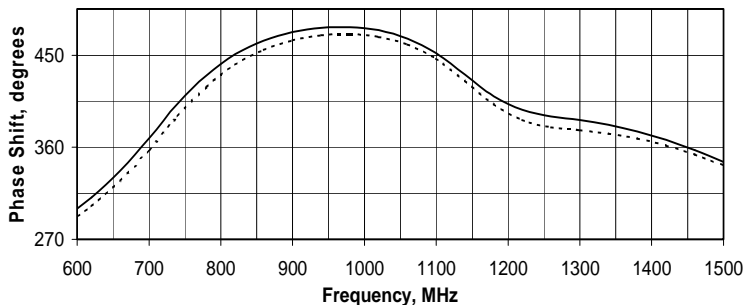
Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H
1.25	1.25	.75	.63	.38	1.000	.125	1.000
31.75	31.75	19.05	16.00	9.65	25.40	3.18	25.40
J	K	L	M	N	P	Q	wt.
—	—	.125	1.688	2.18	.75	.07	grams
—	—	3.18	42.88	55.37	19.05	1.78	70.0

Application Block Diagram

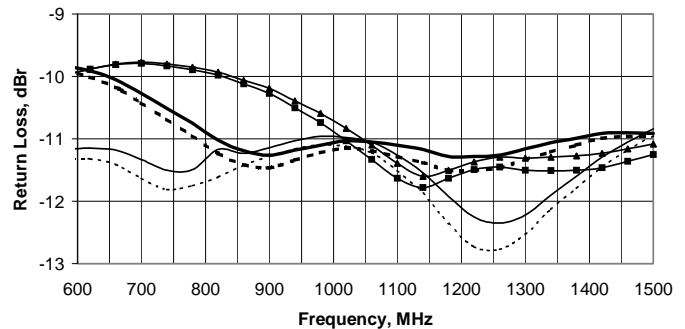


Maximum Phase Shift vs. Frequency
at temperature extremes
@ Pin = +7 dBm



— 0C - - - - +50C

Return Loss vs. Frequency
at temperature extremes
@ Pin = +7dBm



- - - - Vc=1V@0C - - - - Vc=10V@0C — Vc=25V@0C
 — Vc=1V@+50C — Vc=10V@+50C — Vc=25V@+50C