

## FIXED MAGNITUDE MISMATCH 110 to 1300 MHz



ELS

| MODEL NO.      | FREQUENCY RANGE (MHz)<br>$f_L$ - $f_U$ | INPUT POWER (dBm)<br>Max. | PHASE RANGE (Degrees)<br>Min. | RETURN LOSS (dB)<br>Typ. | CONTROL VOLTAGE (V) | CASE STYLE<br>Note B | CONNECTION | PRICE \$<br>Qty. (1-9) |
|----------------|----------------------------------------|---------------------------|-------------------------------|--------------------------|---------------------|----------------------|------------|------------------------|
| NEW ▲ ELS-210  | 110-210                                | 10                        | 360                           | 10-12                    | 0.5-25              | K18                  | mv         | 149.95                 |
| NEW ▲ ELS-450  | 180-450                                | 10                        | 360                           | 10-12                    | 0.5-25              | K18                  | mv         | 149.95                 |
| NEW ▲ ELS-950  | 400-950                                | 10                        | 360                           | 10-12                    | 0.5-25              | K18                  | mv         | 149.95                 |
| NEW ▲ ELS-1300 | 750-1300                               | 10                        | 360                           | 10-12                    | 1-25                | K18                  | mv         | 149.95                 |

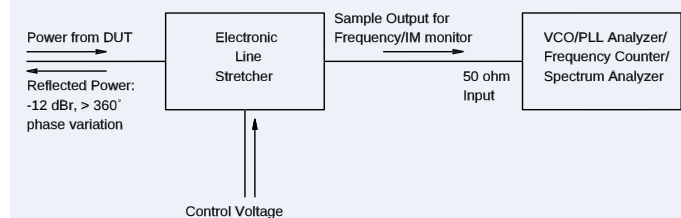
### features

- over 360° phase shift of the reflected signal
- normalized and stable magnitude of the reflected signal
- voltage controlled for automated applications
- patent pending

### applications

- automated load-pull measurement of oscillators
- see application note AN-45-001 on our website

### application block diagram



### NOTES:

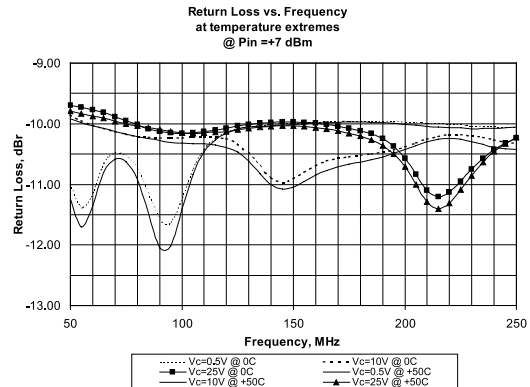
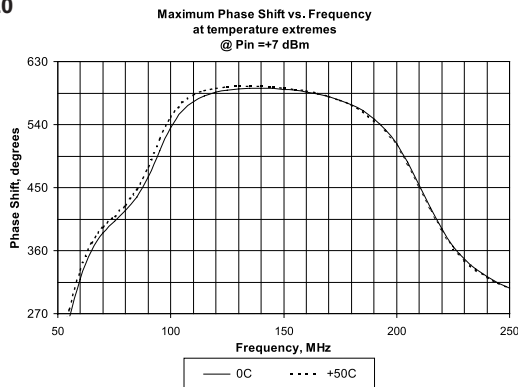
- ▲ Available only with SMA connectors
- A. General Quality Control Procedures, Environmental Specifications, Hi-Rel and MIL description are given in General Information (Section 0).
- B. Connector types and case mounted options, case finishes are given in section 0, see "Case Styles & Outline Drawings".
- C. Prices and Specifications subject to change without notice.
- 1. Absolute maximum power, voltage and current rating:
  - 1a. RF Input power, +13 dBm
  - 1b. Control voltage, 0.5V to 30V
- 2. Operating temperature, 0°C to 50°C
- 3. Storage temperature: -40°C to 100°C

### coaxial connections

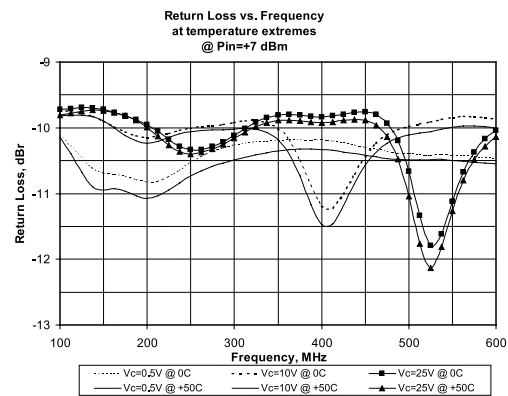
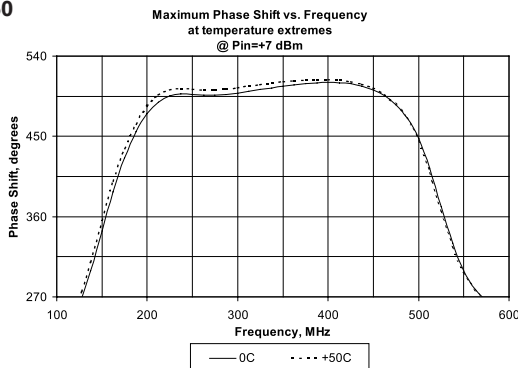
| PORT                     | mv |
|--------------------------|----|
| RF IN                    | 1  |
| MONITOR OUT <sup>1</sup> | 2  |
| CONTROL                  | 3  |

<sup>1</sup> Monitor out port should be connected to a 50-ohm load.

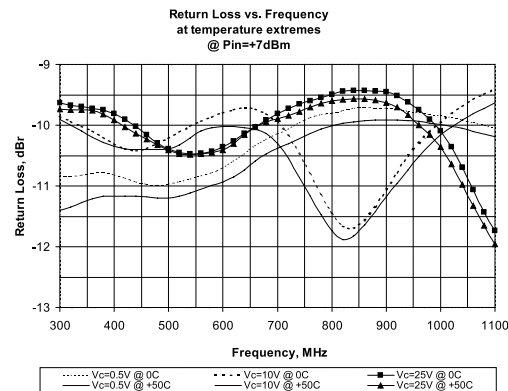
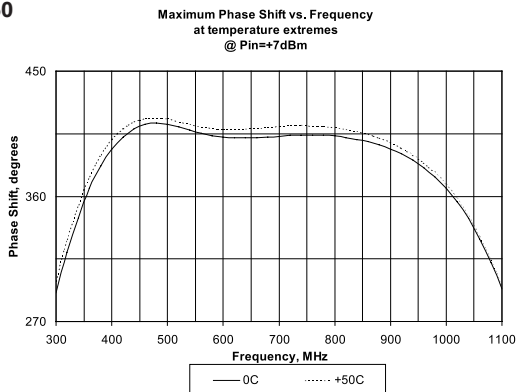
### ELS-210



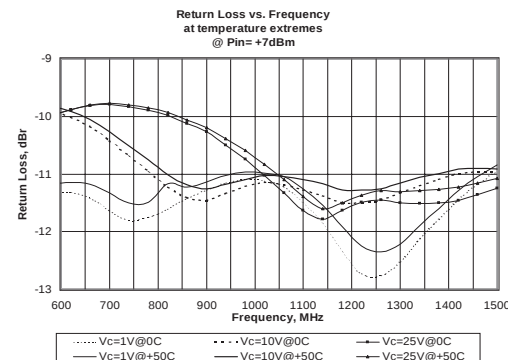
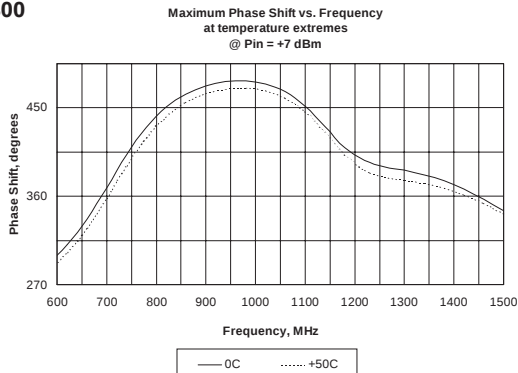
### ELS-450



### ELS-950



### ELS-1300



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