

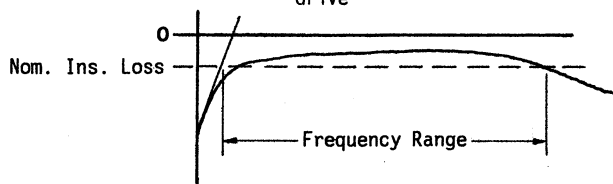
## IT SERIES

### KWIK-LATCH® CURRENT TRANSFORMERS

The IT KWIK-LATCH® series are wideband current transformers that are used to inductively couple current on cables or conductors to be tested. The latch type design allow fast and simple attachment without having to pass cables or conductors through the aperture. Other aperture sizes and output connectors are available to meet the unique application.

#### Pertinent Equations

$$\text{Insertion Loss} = \text{db} = 20 \log_{10} \frac{I_{\text{induced}}}{I_{\text{drive}}} \quad \text{or} \quad I_{\text{induced}} = I_{\text{drive}} \times 10^{\frac{-\text{db}}{20}}$$



#### Specifications

|                                  | <u>MODEL</u>                          |                                       |                                       |                                       |
|----------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|---------------------------------------|
|                                  | IT-050-1                              | IT-075-1                              | IT-125-1                              | IT-125-2                              |
| Electrical                       |                                       |                                       |                                       |                                       |
| Frequency Range                  | 100KHz - 100MHz                       | 100KHz - 100MHz                       | 100KHz - 100MHz                       | 50KHz - 700MHz                        |
| Insertion Loss <sup>1</sup> (db) | 20 ± 3                                | 20 ± 3                                | 20 ± 3                                | 10 ± 3                                |
| Turns Ratio                      | 10                                    | 10                                    | 10                                    | 1                                     |
| Typical Saturation Level         |                                       |                                       |                                       |                                       |
| Pulse (amp — μsec)               | $\frac{\sim 20^*}{n \cdot R_L}$       | $\frac{\sim 20^*}{n \cdot R_L}$       | $\frac{\sim 20^*}{n \cdot R_L}$       | $\frac{\sim 20^*}{n \cdot R_L}$       |
| CW (amps peak)MHz                | $\frac{\sim 20^* \pi f}{n \cdot R_L}$ | $\frac{\sim 20^* \pi f}{n \cdot R_L}$ | $\frac{\sim 20^* \pi f}{n \cdot R_L}$ | $\frac{\sim 20^* \pi f}{n \cdot R_L}$ |
| Physical                         |                                       |                                       |                                       |                                       |
| Connector                        | Type N                                | Type N                                | Type N                                | Type N                                |
| Dimensions (in.)                 | A<br>D<br>T                           | .50<br>2.75<br>1.37                   | .75<br>3.00<br>1.37                   | 1.25<br>3.25<br>1.37                  |

\* Function of turns ratio and core material

1: Nominal Insertion Loss (a calibration curve is supplied with each unit)

