

### Features

1. The multi-layered Power Inductors provide high reliability for your products.
2. Magnetic shielded structure
3. Condensed SMT available.
4. Minimized design that is suitable for portable electronic equipments requiring low profile.
5. Lead Free (RoHS compliance).

### Applications

1. DC-DC converter for mobile phone
2. MP3 Player
3. Digital still cameras / DVR
4. LCD Driver Module
5. Portable digital equipment

### Ordering Information

| SCPI | - | A   | 3225 | 472 | - | M   | J   | T   |
|------|---|-----|------|-----|---|-----|-----|-----|
| (1)  |   | (2) | (3)  | (4) |   | (5) | (6) | (7) |

#### (1) Products Series

SCPI : Inductor for Power Line

#### (5) Tolerance

M :  $\pm 20\%$

#### (2) Materials & Design

A : For high current

#### (6) Termination

J : Nickel barrier

#### (3) Dimension

First two digits : length (mm)

Last two digits : width (mm)

#### (7) Packaging

B : Bulk Packing

T : Tape & Reel ( $\Phi$  178mm [ 7inches])

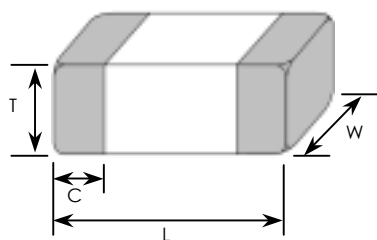
L : Tape & Reel ( $\Phi$  254mm [10inches])

#### (4) Inductance

First two digits are inductance values.

Last digit is the number of zeros .

### Shape and Dimensions



(Unit : mm[inch])

| Type       | L                                   | W                                   | T                                   | C                                    |
|------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------------------|
| SCPI A3225 | $3.2 \pm 0.20$<br>[.126 $\pm$ .008] | $2.5 \pm 0.20$<br>[.098 $\pm$ .008] | $1.0 \pm 0.20$<br>[.039 $\pm$ .008] | $0.50 \pm 0.30$<br>[.020 $\pm$ .012] |

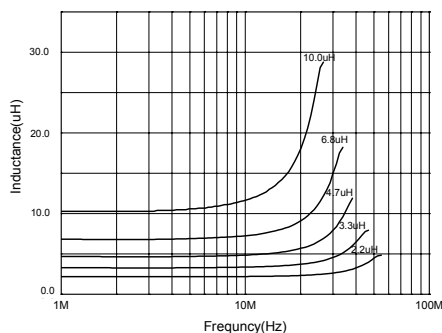
### Electrical Parameters

| Part Number       | Inductance at 1MHz( $\mu$ H) |            | Q-factor at 1MHz | DC Resistance ( $m\Omega$ )<br>$\pm 20\%$ | Current (mA) *1)<br>$\Delta L/L_0=30\%$ |
|-------------------|------------------------------|------------|------------------|-------------------------------------------|-----------------------------------------|
|                   | Typ.                         | Tolerance  | Typ              |                                           |                                         |
| SCPI-A3225-222□□□ | 2.2                          | $\pm 20\%$ | 23               | 300                                       | 1300                                    |
| SCPI-A3225-332□□□ | 3.3                          |            | 25               | 380                                       | 1060                                    |
| SCPI-A3225-472□□□ | 4.7                          |            | 28               | 450                                       | 850                                     |
| SCPI-A3225-682□□□ | 6.8                          |            | 30               | 520                                       | 680                                     |
| SCPI-A3225-103□□□ | 10.0                         |            | 35               | 640                                       | 510                                     |

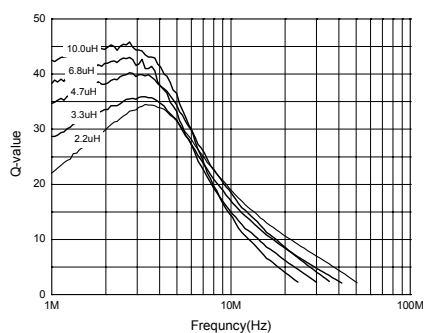
\*1) Saturation Current: The DC current at which the inductance decreases to 70% of its initial value.

### Electrical Characteristic Curves

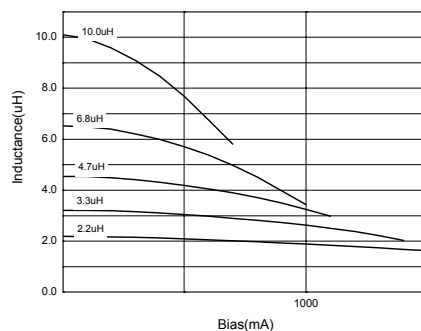
Inductance vs Frequency



Q-factor vs Frequency



Inductance vs Bias



#### Test Equipment & Fixture

- ※ L, Q : HP4285A LCR Meter
- ※ Rdc : TWA-161A, B
- ※ L Test Frequency : 1MHz