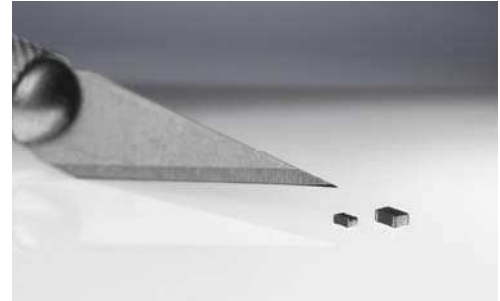


**Applications:**

- Coupling
- Noise Suppression

**Features:**

- Low ESR
- Applicable for reflow soldering

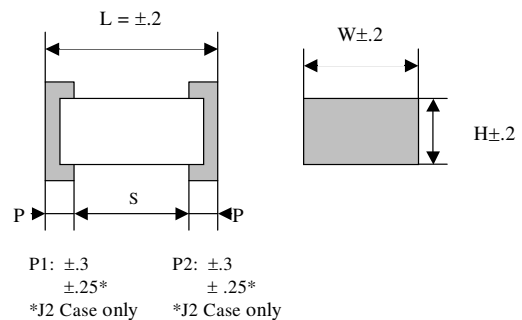
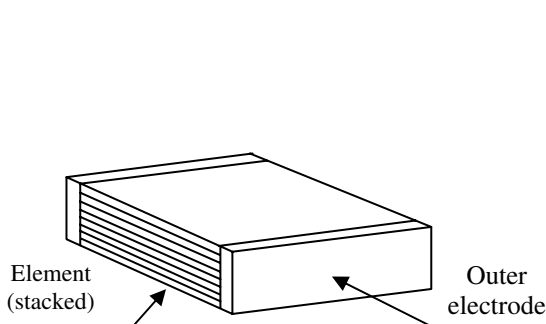


**Electrical Specifications:**

|                       |  |
|-----------------------|--|
| Operating temp. range | -40 to +105°C  |
| Rated voltage         | 25VDC  |
| Capacitance range     | 0.01 to 1.0uF  |
| Capacitance tolerance | ±5% (J), 10% (K)   |
| Dissipation factor    | 1.5%max. (20°C, 1kHz)  |
| Withstand voltage     | Between terminals: Rated volt (VDC)x150%, 1 min.   |
| Insulation resistance | 0.010uF – 0.33uF : 1000MΩ min. (20°C, 25VDC , 60s)<br>0.33uF – 1.0uF : 300MΩ • uF min. (20°C, 25VDC 60s) |
| Soldering Conditions  | Reflow: soldering 250°C Max and 30sec max. at more than 220°C (Temp. at cap. surface)                    |

**Construction**

**Dimensions in mm (not to scale)**



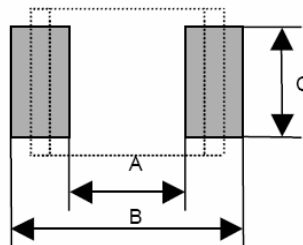
| Size Code | L   | W    | H   | P1, P2 | S    |
|-----------|-----|------|-----|--------|------|
| KO        | 1.6 | 0.8  | 0.6 | 0.40   | ≥.40 |
| J1        | 2.0 | 1.25 | 0.8 | 0.45   | ≥.60 |
| J2        | 2.0 | 1.25 | 1.0 | 0.45   | ≥.60 |
| H1        | 3.2 | 1.6  | 0.8 | 0.65   | ≥1.0 |
| H2        | 3.2 | 1.6  | 1.0 | 0.65   | ≥1.0 |
| H3        | 3.2 | 1.6  | 1.4 | 0.65   | ≥1.0 |

**Ratings, Dimensions, and Quantity per reel**

| Part Number   | Cap. (μF) | Rating volt. 16VDC |      |     | Size Code | Quantity |
|---------------|-----------|--------------------|------|-----|-----------|----------|
|               |           | L                  | W    | H   |           |          |
| PPCX103J25KOT | 0.01      | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX123J25KOT | 0.012     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX153J25KOT | 0.015     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX183J25KOT | 0.018     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX223J25KOT | 0.022     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX273J25KOT | 0.027     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX333J25KOT | 0.033     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX393J25KOT | 0.039     | 1.6                | 0.8  | 0.6 | KO        | 4000     |
| PPCX473J25J1T | 0.047     | 2.0                | 1.25 | 0.8 | J1        | 3000     |
| PPCX563J25J1T | 0.056     | 2.0                | 1.25 | 0.8 | J1        | 3000     |
| PPCX683J25J1T | 0.068     | 2.0                | 1.25 | 0.8 | J1        | 3000     |
| PPCX823J25J1T | 0.082     | 2.0                | 1.25 | 0.8 | J1        | 3000     |
| PPCX104J25J2T | 0.1       | 2.0                | 1.25 | 1.0 | J2        | 3000     |
| PPCX124J25J2T | 0.12      | 2.0                | 1.25 | 1.0 | J2        | 3000     |
| PPCX154J25J2T | 0.15      | 2.0                | 1.25 | 1.0 | J2        | 3000     |
| PPCX184J25H1T | 0.18      | 3.2                | 1.6  | 0.8 | H1        | 3000     |
| PPCX224J25H1T | 0.22      | 3.2                | 1.6  | 0.8 | H1        | 3000     |
| PPCX274J25H1T | 0.27      | 3.2                | 1.6  | 0.8 | H1        | 3000     |
| PPCX334J25H1T | 0.33      | 3.2                | 1.6  | 0.8 | H1        | 3000     |
| PPCX394J25H1T | 0.39      | 3.2                | 1.6  | 0.8 | H1        | 3000     |
| PPCX474J25H2T | 0.47      | 3.2                | 1.6  | 1.0 | H2        | 3000     |
| PPCX564J25H2T | 0.56      | 3.2                | 1.6  | 1.0 | H2        | 3000     |
| PPCX684J25H3T | 0.68      | 3.2                | 1.6  | 1.4 | H3        | 2000     |
| PPCX824J25H3T | 0.82      | 3.2                | 1.6  | 1.4 | H3        | 2000     |
| PPCX105J25H3T | 1.0       | 3.2                | 1.6  | 1.4 | H3        | 2000     |

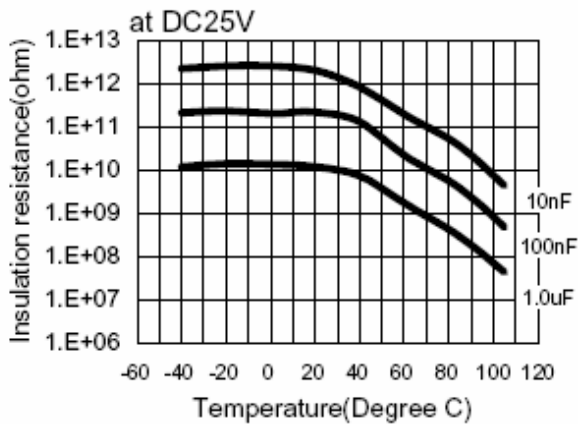
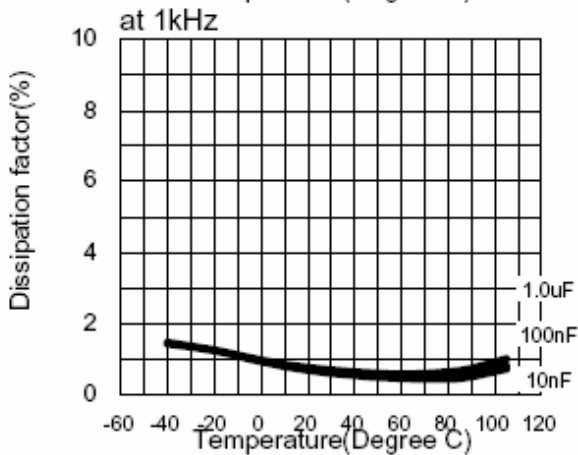
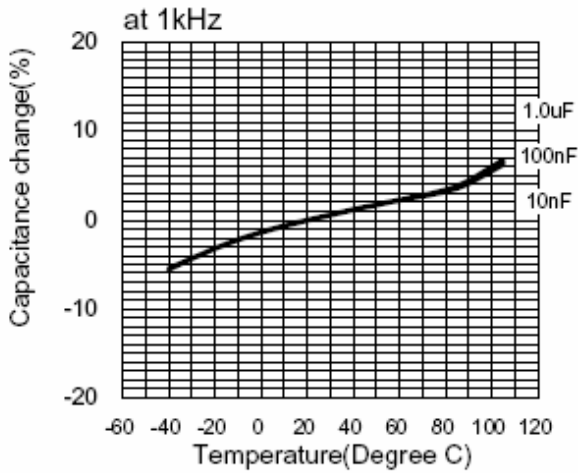
**Land pattern dimensions:**

| Size Code  | Land dimensions<br>Reflow soldering |     |     |
|------------|-------------------------------------|-----|-----|
|            | A                                   | B   | C   |
| KO         | 0.6                                 | 2   | 0.7 |
| J1, J2     | 0.8                                 | 2.4 | 1.1 |
| H1, H2, H3 | 1.8                                 | 3.6 | 1.4 |

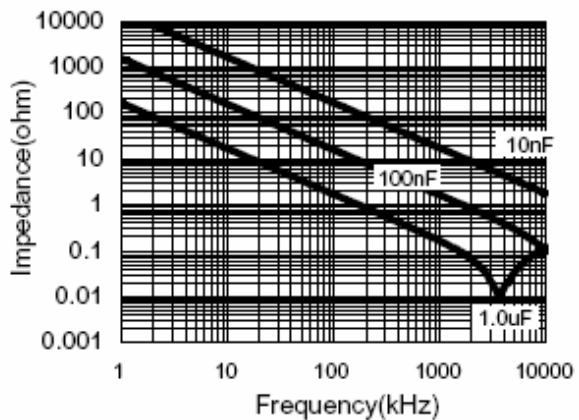
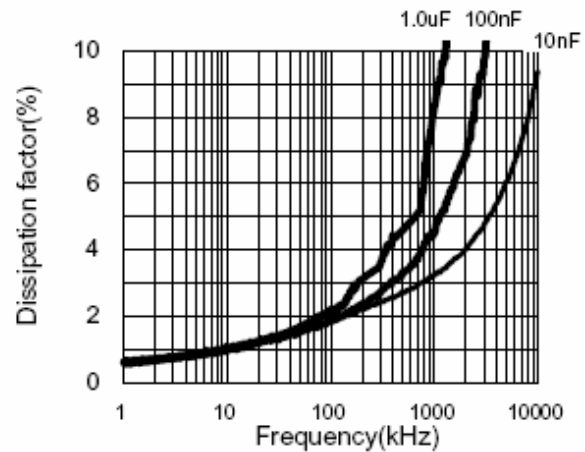
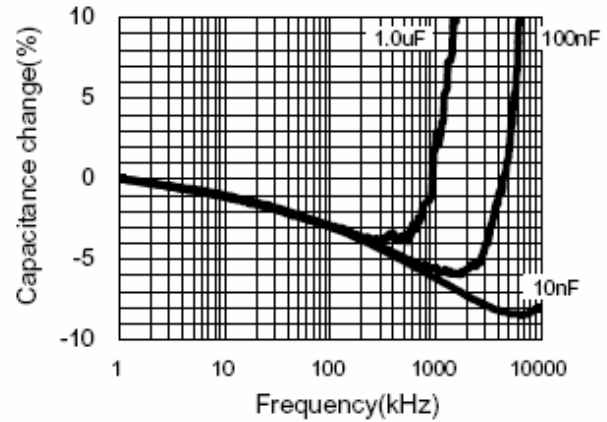


**Electrical characteristics**

**Temperature Characteristics**

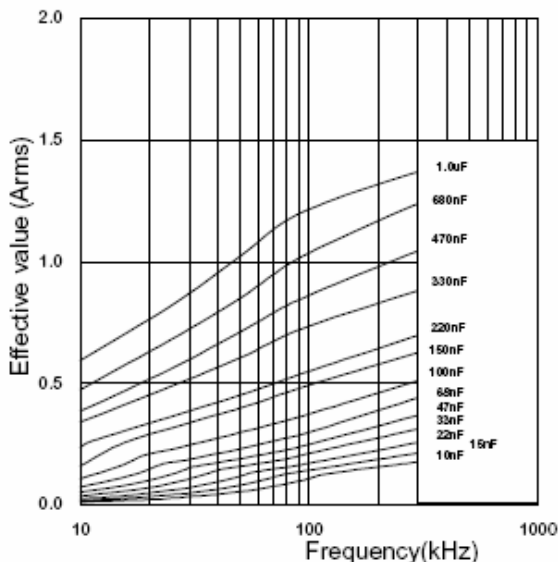


**Frequency Characteristics**

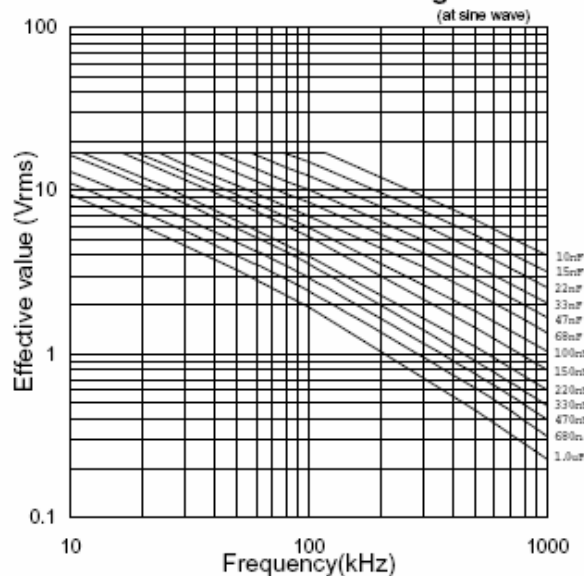


#### Electrical characteristics (cont'd)

#### Permissible Current



#### Permissible Voltage

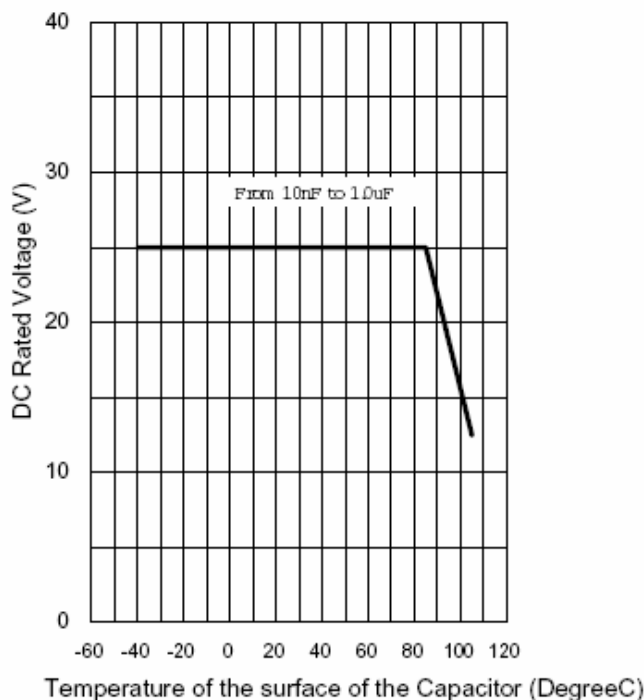


#### Pulse Handling Capability (dv/dt)

(Max 10000cycles)

| Rating Voltage | Capacitance Value(uF) | code | dV/dt (V/us) | Current(0-P) (A) |
|----------------|-----------------------|------|--------------|------------------|
| DC<br>25V      | 0.01                  | 103  | 65           | 0.65             |
|                | 0.012                 | 123  | 58           | 0.70             |
|                | 0.015                 | 153  | 50           | 0.75             |
|                | 0.018                 | 183  | 47           | 0.85             |
|                | 0.022                 | 223  | 40           | 0.88             |
|                | 0.027                 | 273  | 37           | 1.00             |
|                | 0.033                 | 333  | 33           | 1.09             |
|                | 0.039                 | 393  | 30           | 1.17             |
|                | 0.047                 | 473  | 27           | 1.27             |
|                | 0.056                 | 563  | 25           | 1.40             |
|                | 0.068                 | 683  | 23           | 1.56             |
|                | 0.082                 | 823  | 21           | 1.72             |
|                | 0.10                  | 104  | 19           | 1.90             |
|                | 0.12                  | 124  | 17           | 2.04             |
|                | 0.15                  | 154  | 15           | 2.25             |
|                | 0.18                  | 184  | 13           | 2.34             |
|                | 0.22                  | 224  | 12           | 2.64             |
|                | 0.27                  | 274  | 11           | 2.97             |
|                | 0.33                  | 334  | 10           | 3.30             |
|                | 0.39                  | 394  | 8            | 3.12             |
| 0.47           | 474                   | 7    | 3.29         |                  |
| 0.56           | 564                   | 6    | 3.36         |                  |
| 0.68           | 684                   | 5    | 3.40         |                  |
| 0.82           | 824                   | 4    | 3.28         |                  |
| 1.00           | 105                   | 3    | 3.00         |                  |

#### Voltage Derating by Temperature



\*Permissible voltage graph is the case of sine waveform. When you use this product, peak voltage must not exceed DC rated voltage.

\*The current(0-P) value is calculated using nominal capacitance.