

| | | |
|---------------|-----------|----|
| Size | 0.4 x 0.2 | mm |
| Capacitance | 470 | pF |
| Rated Voltage | 3.6 | V |

●Features

- High reliability
- Low profile (180μm)
- ESD protection level ±8kV(HBM)
- Dimension tolerance ±10μm
- High shear strength by large electrode size

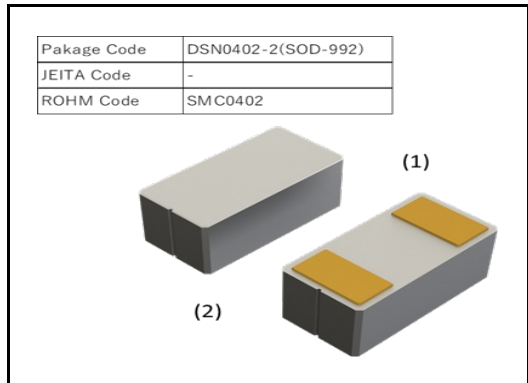
●Application

- Wireless
- Wearable equipment
- Optical transceiver

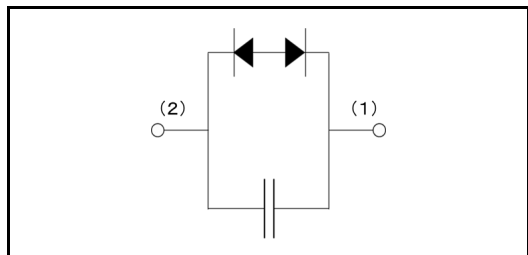
●Structure

- Trench Capacitor (NiPdAu electrode type)

●Outline



●Inner Circuit



●Packaging Specifications

| Packing | Embossed Tape |
|---------------------------|---------------|
| Real Size (mm) | 180 |
| Taping Width (mm) | 8 |
| Basic Ordering Unit (pcs) | 27,000 |
| Taping Code | T27N |
| Marking | 0 |

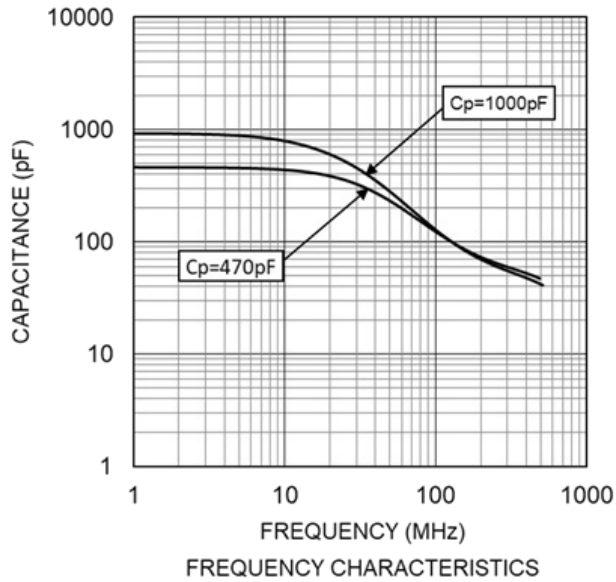
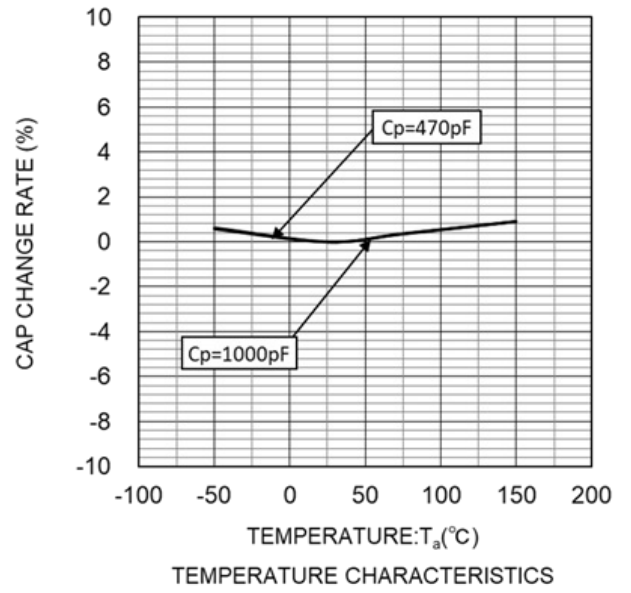
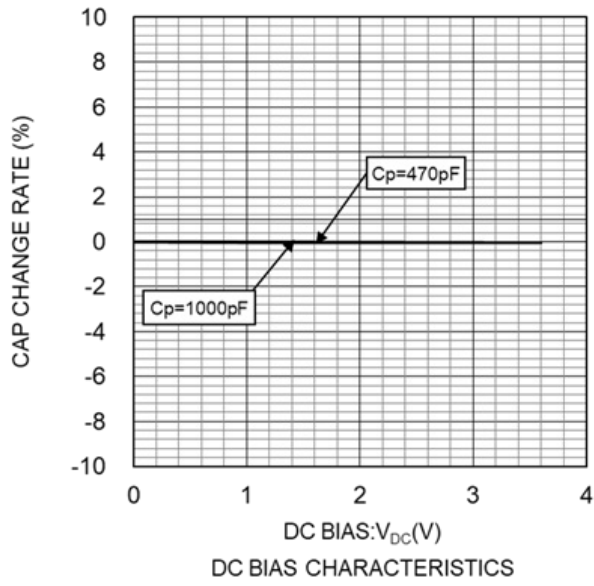
●Absolute maximum ratings $T_a=25^{\circ}\text{C}$

| Parameter | Symbol | Conditions | Min. | Max. | Unit |
|---------------------------------|------------------|-----------------------|------|------|------|
| Electrostatic discharge voltage | V_{ESD} | HBM (C=100pF R=1.5kΩ) | ±8 | | kV |
| Storage temperature | T_{stg} | — | -55 | 150 | °C |
| Operation temperature | T_{opr} | — | -55 | 150 | °C |

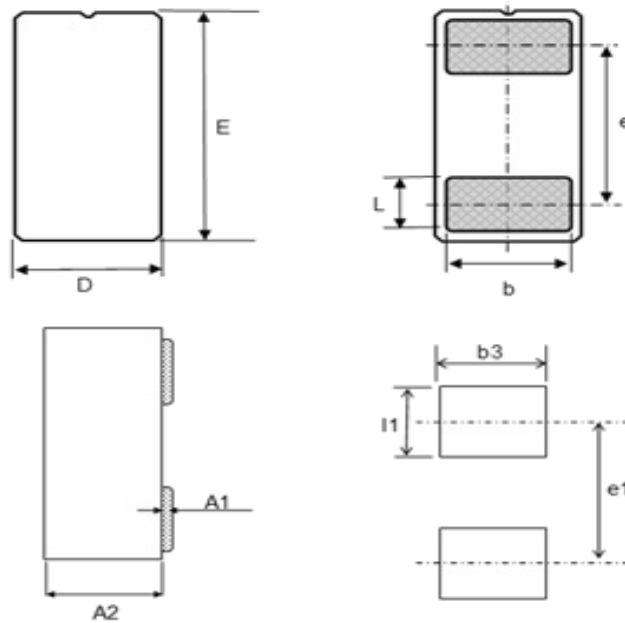
●Characteristics $T_a=25^{\circ}\text{C}$

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|-----------------------------------|------------------|---------------------------|------|------|------|------|
| Capacitance value | C | — | - | 470 | - | pF |
| Capacitance tolerance | ΔC_P | — | -15 | - | 15 | % |
| Capacitance temperature variation | ΔC_T | -55°C ~ 150°C | - | C0K | - | |
| Rated voltage | R_{VDC} | — | - | - | 3.6 | V |
| Reverse breakdown voltage | V_{BR} | IR=1mA | 8.2 | - | 9.2 | V |
| Insulation resistor | IR | R_{VDC} , 120sec | - | 10 | - | GΩ |

● Characteristic Curves

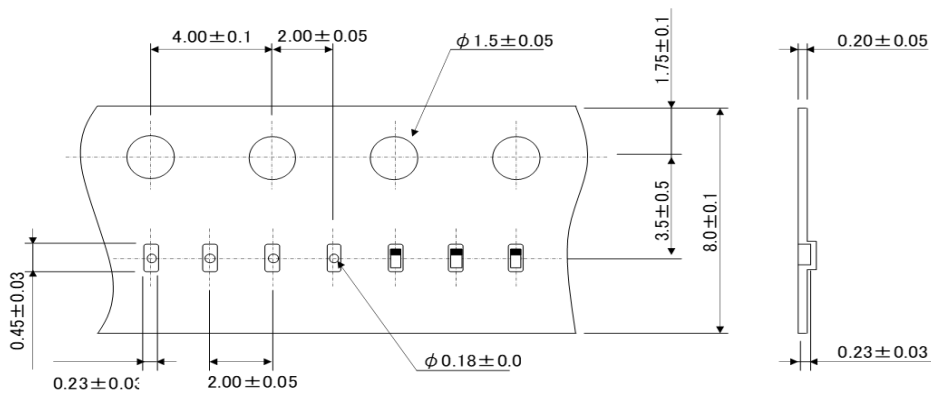


● Dimensions (SOD-992 DSN0402-2 SMC0402)



| DIM | Millimeters | | | Inches | | |
|-----|-------------|---------|-------|--------|---------|-------|
| | Min. | Average | Max. | Min. | Average | Max. |
| A1 | 0.001 | 0.005 | 0.009 | 0.000 | 0.000 | 0.000 |
| A2 | 0.170 | 0.180 | 0.190 | 0.007 | 0.007 | 0.007 |
| b | 0.160 | 0.170 | 0.180 | 0.006 | 0.007 | 0.007 |
| D | 0.190 | 0.200 | 0.210 | 0.007 | 0.008 | 0.008 |
| E | 0.390 | 0.400 | 0.410 | 0.015 | 0.016 | 0.016 |
| L | 0.084 | 0.094 | 0.104 | 0.003 | 0.004 | 0.004 |
| e | 0.266 | 0.276 | 0.286 | 0.010 | 0.011 | 0.011 |
| l1 | - | 0.150 | - | - | 0.006 | - |
| b3 | - | 0.200 | - | - | 0.008 | - |
| e1 | - | 0.260 | - | - | 0.010 | - |

● Taping (Unit:mm)



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