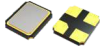

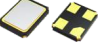





















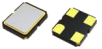

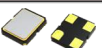












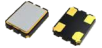
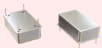
Quartz Crystal

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|--------------------------------------|---------------|-----|---|
| 1 | TX9 | 1.2 x 1.0 x 0.33 | 32MHz-96MHz | 4 |  |
| 2 | TX8 | 1.6 x 1.2 x 0.35 | 20MHz-66MHz | 4 |  |
| 3 | TX1 | 2.0 x 1.6 x 0.5 | 16MHz-96MHz | 4 |  |
| 4 | TX2 | 2.5 x 2.0 x 0.55 | 12MHz-54MHz | 4 |  |
| 5 | TX3 | 3.2 x 2.5 x 0.7 | 8MHz-104MHz | 4 |  |
| 6 | TX5 | 5.0 x 3.2 x 0.9 | 8MHz-100MHz | 4 |  |
| 7 | TX7 | 7.0 x 5.0 x 1.1 | 6MHz-110MHz | 4 |  |
| 8 | TG5 | 5.0 x 3.2 x 1.2 | 8MHz-80MHz | 2 |  |
| 9 | WX6 | HC-49S 11.05 x 4.7 x 3.68 | 3.2MHz-100MHz | 2 |  |
| 10 | WS6 | HC-49SS 11.05 x 4.7 x 2.0/2.5/3.0 | 3.2MHz-100MHz | 2 |  |
| 11 | WS7 | HC-49SS SMD 12.7x4.8x2.0/2.5/3.0 | 3.2MHz-100MHz | 2 |  |
| 12 | WX7 | HC-49S SMD 12.7 x 4.8 x 3.8 | 3.2MHz-100MHz | 2 |  |

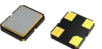







Tuning fork Crystal

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|------------------|--------------|-----|---|
| 13 | TS7 | 1.2 x 1.0 x 0.5 | 32.768kHz | 2 |  |
| 14 | TS8 | 1.6 x 1.0 x 0.5 | 32.768kHz | 2 |  |
| 15 | TS9 | 2.0 x 1.2 x 0.6 | 32.768kHz | 2 |  |
| 16 | WX1 | 3.2 x 1.5 x 0.75 | 32.768kHz | 2 |  |
| 17 | WX3 | 3.8 x 8.0 x 2.5 | 30kHz-350kHz | 4 |  |
| 18 | WX4 | 6.9 x 1.4 x 1.3 | 32.768kHz | 4 |  |
| 19 | WX2 | Φ2 x 6 | 30kHz-350kHz | 2 |  |
| 20 | WT8 | Φ3 x 8 | 30kHz-350kHz | 2 |  |
| 21 | WA4 | Φ2 x 6/SMD | 32.768kHz | 2 |  |
| 22 | WX8 | Φ2 x 6 /SMD | 30kHz-350kHz | 2 |  |



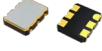





Crystal Oscillator(CMOS)

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|--------------------|--|-----|---|
| 23 | TK2 | 2.5 x 2.0 x 0.81 | 32.768kHz | 4 |  |
| 24 | TK3 | 3.2 x 2.5 x 0.95 | 32.768kHz | 4 |  |
| 25 | TK4 | 2.5 x 2.0 x 0.81 | 32.768kHz <small>Low Current Consumption</small> | 4 |  |
| 26 | TK5 | 3.2 x 2.5 x 0.95 | 32.768kHz | 4 |  |
| 27 | TC1 | 2.05 x 1.65 x 0.75 | 1.5MHz-50MHz <small>Low Current Consumption</small> | 4 |  |
| 28 | TC2 | 2.5 x 2.0 x 0.81 | 1.25MHz-125MHz | 4 |  |
| 29 | TC3 | 3.2 x 2.5 x 0.95 | 1.25MHz-125MHz | 4 |  |
| 30 | TC5 | 5.0 x 3.2 x 1.2 | 13.7kHz-160MHz | 4 |  |
| 31 | TC7 | 7.0 x 5.0 x 1.3 | 13.7kHz-166MHz | 4 |  |
| 32 | TU2 | 2.5 x 2.0 x 0.81 | 1MHz-50MHz <small>Ultra Low Power</small> | 4 |  |
| 33 | TU3 | 3.2 x 2.5 x 0.95 | 1MHz-50MHz <small>Ultra Low Power</small> | 4 |  |
| 34 | TW2 | 2.5 x 2.0 x 0.81 | 1.25MHz-100MHz <small>Extended Operating Temperature Range</small> | 4 |  |
| 35 | TW3 | 3.2 x 2.5 x 0.95 | 1.25MHz-100MHz | 4 |  |
| 36 | TN2 | 2.5 x 2.0 x 0.81 | 20MHz-60MHz <small>Extended Operating Temperature Range Ultra Low Noise</small> | 4 |  |
| 37 | TN3 | 3.2 x 2.5 x 0.95 | 20MHz-60MHz <small>Ultra Low Noise</small> | 4 |  |
| 38 | LO1 | 20.8 x 12.46 x 5 | 0.25MHz-180MHz | 4 |  |
| 39 | LO2 | 12.46 x 12.46 x 5 | 0.25MHz-180MHz | 4 |  |



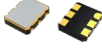









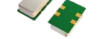
FASTXO Crystal Oscillator(CMOS)

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|--------------------|---|-----|---|
| 40 | TB1 | 2.05 x 1.65 x 0.75 | 1MHz-200MHz | 4 |  |
| 41 | TB2 | 2.5 x 2.0 x 0.81 | 1MHz-200MHz | 4 |  |
| 42 | TB3 | 3.2 x 2.5 x 0.95 | 1MHz-200MHz | 4 |  |
| 43 | TB5 | 5.0 x 3.2 x 1.2 | 1MHz-200MHz | 4 |  |
| 44 | TB7 | 7.0 x 5.0 x 1.3 | 1MHz-200MHz | 4 |  |
| 45 | TL2 | 3.2 x 2.5 x 0.90 | 10MHz-250MHz <small>Low Phase Jitter</small> | 6 |  |
| 46 | TL4 | 5.0 x 3.2 x 1.25 | 10MHz-250MHz <small>Low Phase Jitter</small> | 6 |  |
| 47 | TL6 | 7.0 x 5.0 x 1.45 | 10MHz-250MHz <small>Low Phase Jitter</small> | 6 |  |

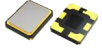
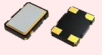
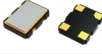
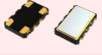
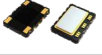
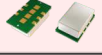







Crystal Oscillator(LVPECL/LVDS/HCSL/CML)

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|------------------|---------------------------------------|-----|---|
| 48 | TL3 | 3.2 x 2.5 x 0.90 | 10MHz-1500MHz | 6 |  |
| 49 | TL5 | 5.0 x 3.2 x 1.25 | 10MHz-1500MHz | 6 |  |
| 50 | TL7 | 7.0 x 5.0 x 1.45 | 10MHz-1500MHz | 6 |  |
| 51 | TP3 | 3.2 x 2.5 x 0.90 | 10MHz-250MHz Low Phase Jiter | 6 |  |
| 52 | TP5 | 5.0 x 3.2 x 1.25 | 10MHz-320MHz Low Phase Jiter | 6 |  |
| 53 | TP7 | 7.0 x 5.0 x 1.45 | 10MHz-320MHz Low Phase Jiter | 6 |  |
| 54 | TN7 | 7.0 x 5.0 x 1.45 | 70MHz-170MHz Ultra Low Phase Jiter | 6 |  |
| 55 | TQ7 | 7.0 x 5.0 x 1.45 | 25MHz-75MHz HCSL | 6 |  |

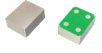
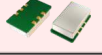


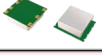




VCXO

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|--|--|-----|---|
| 56 | PV3 | 3.2 x 2.5 x 0.9 | 10MHz-250MHz | 6 |  |
| 57 | PV5 | 5.0 x 3.2 x 1.25 | 10MHz-250MHz | 6 |  |
| 58 | PV7 | 7.0 x 5.0 x 1.75 | 10MHz-250MHz | 6 |  |
| 59 | PL3 | 3.2 x 2.5 x 0.9 | 10MHz-1500MHz Differenn al Output | 6 |  |
| 60 | PL5 | 5.0 x 3.2 x 1.25 | 10MHz-1500MHz Differenn al Output | 6 |  |
| 61 | PL7 | 7.0 x 5.0 x 1.75 | 10MHz-1500MHz Differenn al Output | 6 |  |
| 62 | CL5 | 5.0 x 3.2 x 1.25 | 30MHz-250MHz Low Phase Jiter | 6 |  |
| 63 | CL7 | 7.0 x 5.0 x 1.75 | 1.5MHz-200MHz Low Phase Jiter | 6 |  |
| 64 | CV5 | 5.0 x 3.2 x 1.25 | 1.5MHz-170MHz Extended Opera ng emperatureRange | 6 |  |
| 65 | CV7 | 7.0 x 5.0 x 1.75 | 1.5MHz-170MHz Extended Opera ng emperatureRange | 6 |  |
| 66 | CV8 | 14.2 x 9.3 x 5.4 | 30MHz-250MHz | 6 |  |
| 67 | LV1 | 20.3 x 12.6 x 5.0 12.6 x 12.6 x 5.0 | 1MHz-80MHz | 4 |  |
| 68 | LV2 | 13.9 x 9.1 x 3.6 | 50MHz-125MHz | 4 |  |


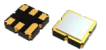
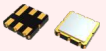
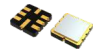

TCXO/VCTCXO

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|-------------------|---|-----|---|
| 69 | VC1 | 2.0 x 1.6 x 0.7 | 10MHz-52MHz | 4/6 |  |
| 70 | VC2 | 2.5 x 2.0 x 0.7 | 10MHz-52MHz | 4 |  |
| 71 | VC3 | 3.2 x 2.5 x 0.9 | 10MHz-52MHz | 4 |  |
| 72 | VC5 | 5.0 x 3.2 x 1.1 | 10MHz-52MHz | 4 |  |
| 73 | VC7 | 7.0 x 5.0 x 1.9 | 5MHz-52MHz | 4 |  |
| 74 | VC8 | 14.3 x 8.7 x 4.9 | 5MHz-40MHz | 6 |  |
| 75 | VP3 | 3.2 x 2.5 x 1.6 | 10MHz-1500MHz High Frequency Temperature Compensated | 6 |  |
| 76 | VW5 | 5.0 x 3.2 x 1.55 | 10MHz-52MHz | 4 |  |
| 77 | VA7 | 7.0 x 5.0 x 1.9 | 5MHz-52MHz High Precision | 4 |  |
| 78 | VS7 | 7.0 x 5.0 x 1.9 | 5MHz-52MHz Stratum 3 | 4 |  |
| 79 | VT7 | 7.0 x 5.0 x 1.9 | 10MHz-52MHz High Precision and High Temperature | 4 |  |
| 80 | VF2 | 20.4 x 12.8 x 7.8 | 10MHz-52MHz | 4 |  |
| 81 | WT1 | 18.5x12 to 91x56 | 1MHz-1500MHz | 4/5 |  |

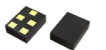

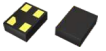
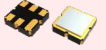
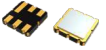
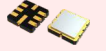
OCXO

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|--------------------|---|-----|---|
| 82 | OC9 | 9.7 x 7.5 x 4.1 | 10MHz-40MHz | 4 |  |
| 83 | OC8 | 14.3 x 9.3 x 6.5 | 10MHz-40MHz | 6 |  |
| 84 | OCH | 20.3 x 12.7 x 11.0 | 5MHz-40MHz | 4 |  |
| 85 | OCW | 20.6 x 20.6 x 11.0 | 5MHz-40MHz | 5 |  |
| 86 | OSD | 25.4 x 22.1 x 11.0 | 5MHz-40MHz | 7 |  |
| 87 | OLH | 25.4 x 25.4 x 12.7 | 5MHz-40MHz | 5 |  |
| 88 | OCN | 25.4 x 25.4 x 12.7 | 10MHz-40MHz Low Phase Noise, Low G-Sensitivity | 5 |  |
| 89 | OSH | 36.3 x 27.2 x 12.7 | 5MHz-40MHz | 5 |  |
| 90 | OCD | 36.3 x 27.2 x 18.7 | 10MHz DOCXO | 5 |  |

SAW Resonator

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|------------------|----------------|-----|---|
| 91 | SR1 | 2.0 x 1.6 x 1.0 | 154MHz-1000MHz | 4 |  |
| 92 | SR3 | 3.0 x 3.0 x 1.25 | 154MHz-1000MHz | 6 |  |
| 93 | SR4 | 3.8 x 3.8 x 1.5 | 154MHz-1000MHz | 6 |  |
| 94 | SR5 | 5.0 x 5.0 x 1.5 | 154MHz-1000MHz | 8 |  |
| 95 | SR6 | 5.0 x 3.5 x 1.4 | 154MHz-1000MHz | 4 |  |

SAW Filter

| Page | Series | Dimension(mm) | Frequency | PAD | Picture |
|------|--------|------------------|----------------|-----|---|
| 96 | SF0 | 1.1 x 0.9 x 0.5 | 800MHz-2605MHz | 5 |  |
| 97 | SF1 | 1.4 x 1.1 x 0.6 | 800MHz-2605MHz | 5 |  |
| 98 | SF2 | 2.0 x 1.5 x 0.6 | 800MHz-2605MHz | 4 |  |
| 99 | SF3 | 3.0 x 3.0 x 1.25 | 300MHz-2605MHz | 6 |  |
| 100 | SF4 | 3.8 x 3.8 x 1.5 | 100MHz-1000MHz | 6 |  |
| 101 | SF5 | 5.0 x 5.0 x 1.5 | 100MHz-1000MHz | 8 |  |