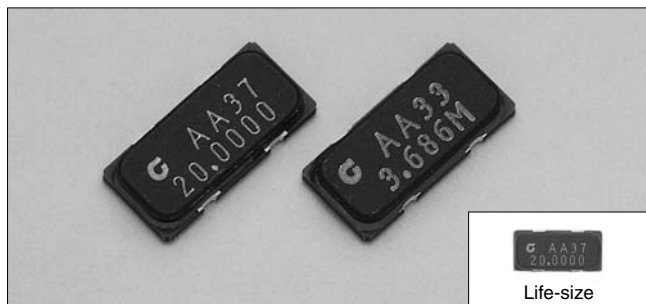


RoHS Compliant Optional

CS20

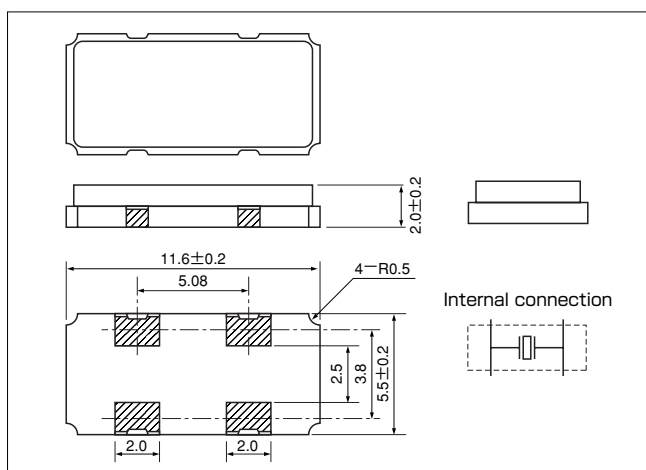
2000pcs/reel



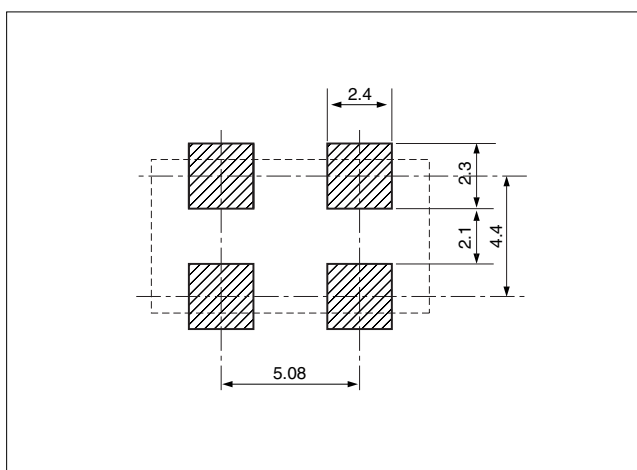
FEATURES

- Reliable ceramic package and excellent environmental characteristics.
- Available for wide range of frequency.
- Suitable for various applications such as communication devices, AV devices, automotive devices and measuring instruments.

DIMENSION [mm]



SOLDER PAD LAYOUT [mm]



STANDARD SPECIFICATIONS

| Item | Model | CS20 | Conditions |
|--|----------------|--|--|
| Nominal Frequency | f_0 | 3.5MHz~30.0MHz (Fundamental) | Need to contact us for the available frequency |
| Frequency Tolerance | $\Delta f/f_0$ | ± 30 ppm | at 25°C |
| Frequency Tolerance over Operating Temperature Range | $\Delta f/f_0$ | below 6.0MHz : ± 50 ppm above 6.0MHz : ± 30 ppm | -10°C~+60°C See figure 3 in P4 |
| Operating Temperature Range | T_{OPR} | -40°C~+85°C | |
| Storage Temperature Range | T_{STR} | -55°C~+125°C | |
| Motional (series) resistance | R_1 | Refer to the following table | at 25°C |
| Load capacitance | C_L | 16.0pF, 18.0pF | Need to specify your requirement |
| Shunt capacitance | C_0 | 7.0pF Max. | |
| Level of drive | D_L | 100 μ W. | |
| Insulation Resistance | I_R | 500M Ω Min. | DC100V \pm 15V |
| Aging (first year) | $\Delta f/f_0$ | ± 5 ppm Max. | 25°C \pm 3°C |

MOTIONAL (SERIES) RESISTANCE (R_1)

| Frequency Range | $3.5\text{MHz} \leq f_0 < 4.0\text{MHz}$ | $4.0\text{MHz} \leq f_0 < 6.0\text{MHz}$ | $6.0\text{MHz} \leq f_0 < 10\text{MHz}$ | $10\text{MHz} \leq f_0 < 14\text{MHz}$ | $14\text{MHz} \leq f_0 \leq 30\text{MHz}$ |
|-----------------|--|--|---|--|---|
| R_1 | 200 Ω Max. | 150 Ω Max. | 100 Ω Max. | 80 Ω Max. | 50 Ω Max. |