

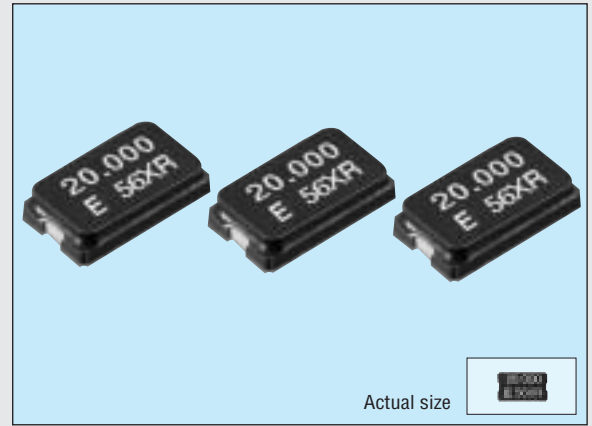
THIN SMD HIGH-FREQUENCY CRYSTAL UNIT

FA-365

Product number (please refer to page 1)

Q22FA365xxxxxx00

- High-density mounting-type SMD.
- Excellent reliability and environment capability.
- Capable of covering a wide frequency range.
(12 MHz and from 14 MHz to 41 MHz)
- 1.4 mm thickness is equal to SMD-type IC.

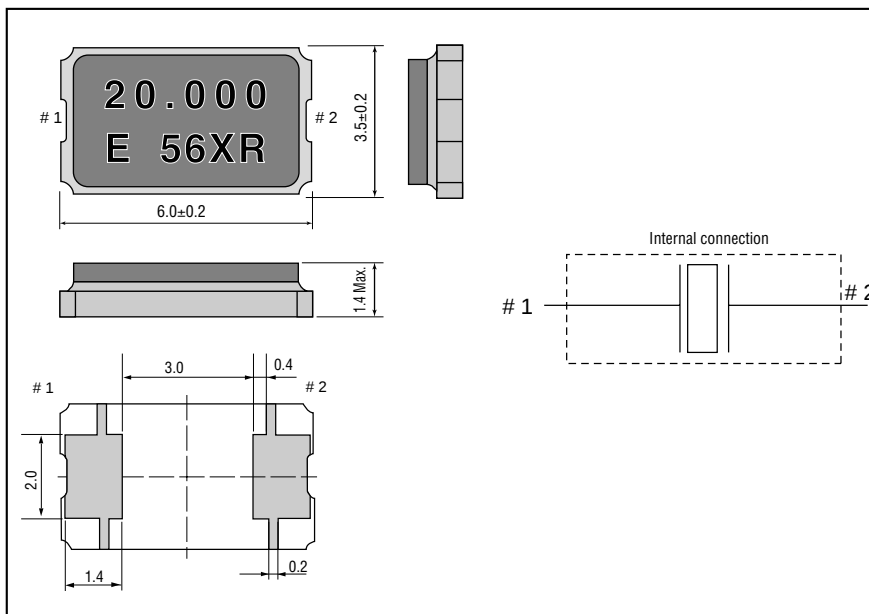


Specifications (characteristics)

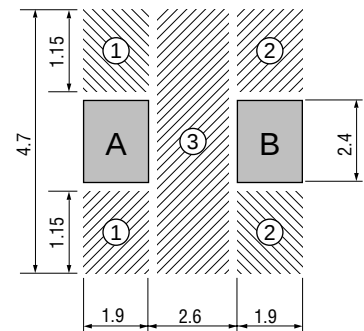
Item		Symbol	Specifications	Remarks
Nominal frequency range		f	12.000 MHz, 14.000 MHz to 41.000 MHz	Fundamental mode
Temperature range	Storage temperature	T _{STG}	-55 °C to +125 °C	Stored as bare product after unpacking
	Operating temperature	T _{OPR}	-20 °C to +70 °C	Please contact us on availability of -40 °C to +85 °C
Drive level	Maximum drive level	GL	2 mW Max.	Only crystal oscillation is guaranteed
	Recommended drive level	DL	10 µW to 100 µW	
Frequency tolerance (standard)		Δf/f	±50 x 10 ⁻⁶ , ±100 x 10 ⁻⁶	Ta=+25 °C±3 °C
Frequency temperature characteristics (standard)			±30 x 10 ⁻⁶	-20 °C to +70 °C For the out of standard specifications, please contact us for inquiries
Load capacitance		C _L	10 pF to ∞	Please specify
Series resistance		R ₁	60 Ω Max.(12.000 MHz)	-20 °C to +70 °C, DL=100 µW
			50 Ω Max.(14.000 MHz to 41.000MHz)	
Shunt capacitance		C ₀	5.0 pF Max.	
Insulation resistance		IR	500 MΩ Min.	
Aging		fa	±5 x 10 ⁻⁶ /year Max.	Ta=+25 °C ±3 °C, first year
Shock resistance		S. R.	±10 x 10 ⁻⁶ Max.	Three drops on a hard board from 750 mm or excitation test with 29400 m/s ² x 0.3 ms x 1/2 sine wave x 3 directions

External dimensions

(Unit: mm)



Recommended soldering pattern (Unit: mm)



Only the pattern which connects with land A is allowed in area ①.
Only the pattern which connects with land B is allowed in area ②.
No pattern is allowed in area ③.