

#### Epson Toyocom

## MHz RANGE CRYSTAL UNIT ULTRA MINIATURE SIZE LOW PROFILE SMD

# FA-20H

- Nominal frequency range
  External dimensions
  Overtone order
  Applications
- : 12 MHz to 48 MHz : 2.5× 2.0×0.55 t (mm)
- : Fundamental
- : Mobile phone, Bluetooth, W-LAN ISM band radio, Clock for MPU



### Specifications (characteristics)

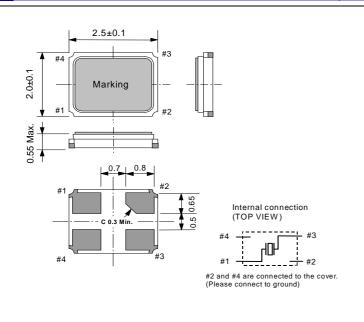
Item	Symbol	Specifications		Remarks
		For RF Reference	For Clock	Rendiks
Nominal frequency range	f_nom	12.000 MHz to 48.000 MHz		Fundamental Please contact us for inquiries regarding the available frequencies.
Storage temperature range	T_stg	-40 °C to +125 °C		Store as bare product after unpacking.
Operating temperature range	T_use	-40 °C to +85 °C		
Level of drive	DL	100 μW Max.	200 μW Max.	Recommended: 1 $\mu$ W to 100 $\mu$ W
Frequency tolerance	f_tol	$\pm 10 \times 10^{-6}$ to $\pm 30 \times 10^{-6}$ *1	$\pm 30  imes 10^{-6}$	+25 °C Please contact us for inquiries.
Frequency versus temperature characteristics	f_tem	$\pm 10 \times 10^{-6}$ to $\pm 30 \times 10^{-6}$ *1	$\pm 30  imes 10^{-6}$	-20 °C to +75 °C Please contact us for inquiries.
Load capacitance	CL	6 pF to ∞		Please specify.
Motional resistance (ESR)	R1	As per below table		-20 °C to +75 °C
Frequency aging	f_age	$\pm 1 \times 10^{-6}$ to $\pm 3 \times 10^{-6}$ / year Max. *1		+25 °C, First year

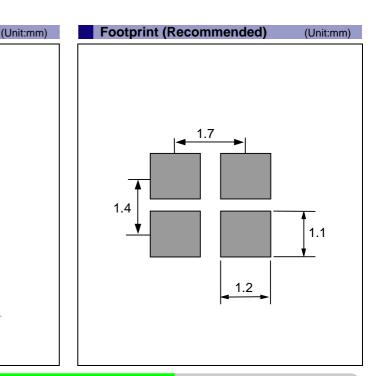
\*1 Please contact us for inquiries regarding available frequency tolerance.

#### Motional resistance (ESR)

Frequency	Motional resistance	
12.0 MHz ≤ f_nom < 16.0 MHz	150 Ω Max.	
16.0 MHz $\leq$ f_nom $\leq$ 25.0 MHz	80 Ω Max.	
25.0 MHz < f_nom ≤ 30.0 MHz	60 Ω Max.	
30.0 MHz < f_nom ≤ 35.0 MHz	50 Ω Max.	
$35.0 \text{ MHz} < f_nom \le 48.0 \text{ MHz}$	40 Ω Max.	

#### External dimensions





# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for epson manufacturer:

Other Similar products are found below :

MA-505 24.0000M-C3 ROHS MC-405 32.7680K-G3: ROHS FA-128 25.0000MF10Z-AC S5U13L02P00C100 S5U13U11P00C100 SG5032CAN 10.000000M-TJGA3 SG5032VAN 200.000000M-KEGA3 SG-210STF 2.0480ML3 SG-531P 7.3728MC:ROHS X1G0044810005 SG7050CAN 10 MHZ S5U1C31W74T1300 S5U1C17W04T2100 IC Socket for 7050 case SG-210STF 40.0000ML TSX-3225 26.0000MF10Z-B6 S5U13513P00C100 SG-210STF 13.5600ML3 SG5032CCN 16.000000M-HJGA3 Q3851CA000055 XG-1000CA 50 MHZ EG-2121CA 644.53125MLGPA M160 MA-506 4.0000M-C3 ROHS EG-2121CA2000000M-LGPAL3 S5U13U00P00C100 FA-118T 52.0000ME12Z-AC3 SG-Writer-II S5U1C17001H3100 S5U13513R00C100 IC Socket for 5032 case SG-210STF 4.0960ML S5U13517P00C200 S5U13748P00C100 S5U1C17W18T2100 SG-310SCF 20.0000MM S5U13781R01C100 Q336150110002 SG-615P 20 MHZ C MA-506 25.0000M-C3:ROHS S5U1C17M13T2100 S5U1C17M13T1100 TG-3541CE 32.7680KXB3 FA-238 25.0000MB50X-C3 RX-8803LC:UB3 PURE SN SG-3030LC 32.7680KB3, PURE SN SG-615P 8.0000MC3: ROHS Q3102JF010001 SG-3030JF 32.768KHZ B M150 S5U1C17W15T2100 FC-135 32.7680KA-K0 XG-2121CA 156.2500M-PGSNB FA-128 25.0000MF20X-WX