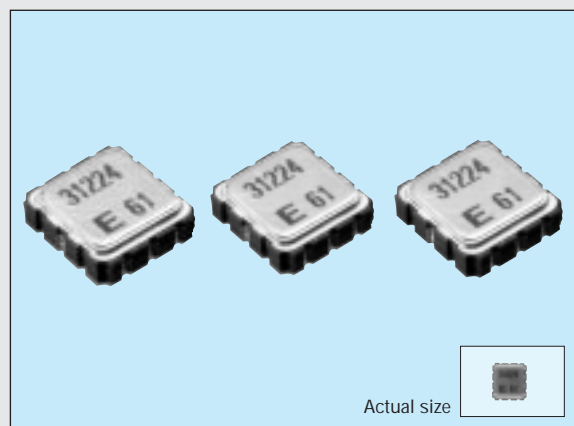


SAW RESONATOR

FS-555

- Reflow solderable SMD ceramic package.
- Capable of covering a wide frequency range, from 200 MHz to 500 MHz.
- 1.5mm thickness is equal to SMD-type IC.
- Perfect for small wireless equipment.

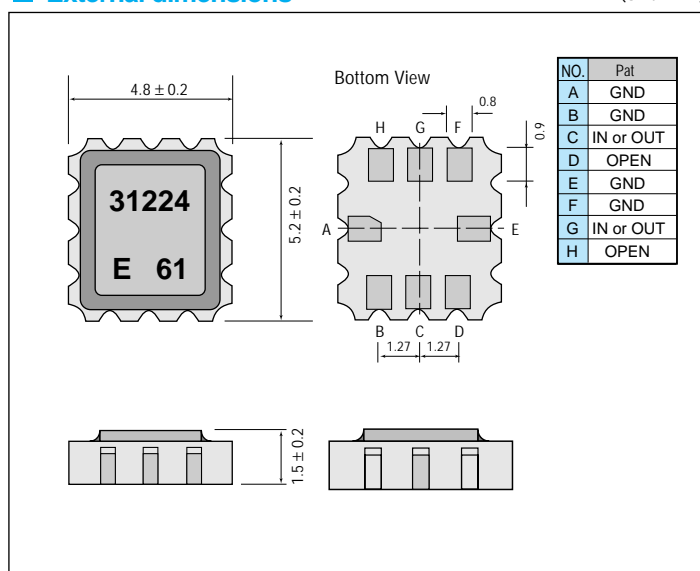


Specifications (characteristics)

Item	Symbol	Specifications	Remarks	
Nominal frequency range	f_0	200 MHz to 500 MHz		
Temperature range	Storage temperature	T_{STG}	-55°C to +100°C	Stored as bare product after unpacking
	Operating temperature	T_{OPR}	-40°C to +85°C	
Maximum drive level	GL	10mW max.		
Recommended level	DL	2mW typ.		
Frequency tolerance (standard)	$\Delta f/f$	$\pm 25\text{ppm}$, $\pm 50\text{ppm}$, $\pm 100\text{ppm}$	$T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$	
Peak temperature	θT	$25^\circ\text{C} \pm 15^\circ\text{C}$		
Temperature coefficient	α	$-3.4 \pm 0.8 \times 10^{-8}/^\circ\text{C}^2$		
Harmonic ratio	R_s/R_1	2 min.		
Series resistance	R_1	40 Ω max.	200 MHz to 249.9 MHz, $T_a = 25^\circ\text{C}$	
		25 Ω max.	250 MHz to 500 MHz, $T_a = 25^\circ\text{C}$	
Motional capacitance	C_1	2.6 fF typ.	($f_0 = 312.24$ MHz)	
Shunt capacitance	C_0	4.3 pF typ.	($f_0 = 312.24$ MHz)	
Insulation resistance	IR	500 M Ω min.		
Aging	f_a	$\pm 10\text{ppm}/\text{year}$ max.	$T_a = 25^\circ\text{C} \pm 3^\circ\text{C}$	
Shock resistance	S.R.	$\pm 10\text{ppm}$ max.	Nine drops on a concrete from 150 cm or excitation test with 3000G x 0.3ms x 1/2 sine wave x 3 directions	

External dimensions

(Unit: mm)



Recommended soldering pattern

(Unit: mm)

