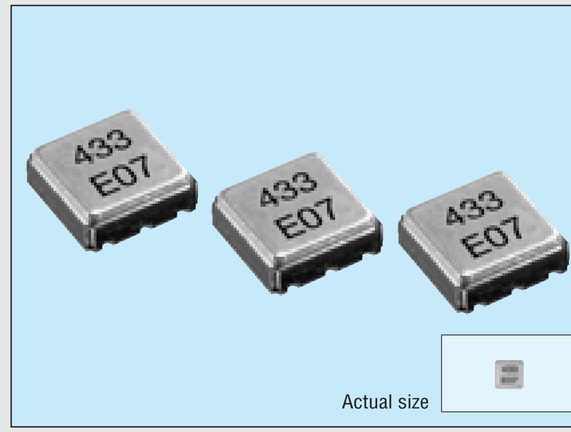
SAW RESONATOR
FS-335

- Reflow solderable SMD ceramic package.
- Capable of covering a wide frequency range, from 300 MHz to 900 MHz.
- 1.3 mm thickness is equal to SMD-type IC.
- Perfect for small wireless equipment.
- Excellent shock resistance and enviromental capability (prevention for contamination)

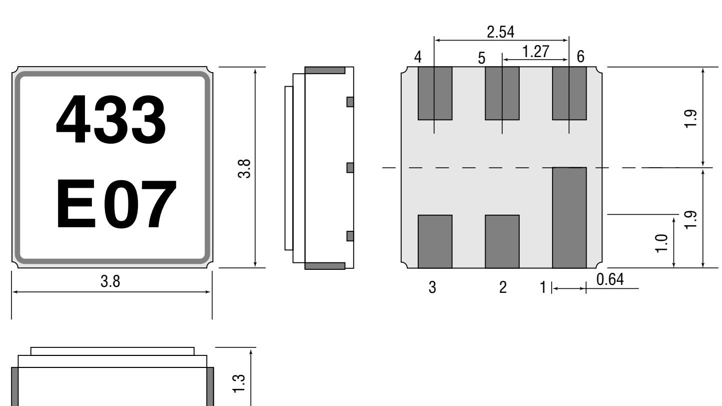


Specifications (characteristics)

Item		Symbol	Specifications	Remarks
Nominal frequency range		f_0	300 MHz to 900 MHz	
Temperature range	Storage temperature	T_{STG}	-40 °C to +85 °C	Stored as bare product after unpacking
	Operating temperature	T_{OPR}	-40 °C to +85 °C	
Maximum drive level		GL	10 mW Max.	300 MHz $\leq f_0 \leq$ 500 MHz
			2 mW Max.	500 MHz $< f_0 \leq$ 900 MHz
Recommended drive level		DL	1 mW Typ.	
Frequency tolerance (standard)		$\Delta f/f$	$\pm 25 \times 10^{-6}$, $\pm 50 \times 10^{-6}$, $\pm 100 \times 10^{-6}$	300 MHz $\leq f_0 \leq$ 500 MHz, Ta=+25 °C ± 3 °C
			$\pm 100 \times 10^{-6}$	500 MHz $< f_0 \leq$ 900 MHz, Ta=+25 °C ± 3 °C
Peak temperature		θT	+25 °C ± 15 °C	
Temperature coefficient		α	$(-3.4 \pm 0.8) \times 10^{-8}$/ °C^2	
Harmonic ratio		R_S/R_1	2 Min.	
Series resistance		R_1	25 Ω Max.	300 MHz $\leq f_0 \leq$ 500 MHz, Ta=+25 °C
			30 Ω Max.	500 MHz $< f_0 \leq$ 900 MHz, Ta=+25 °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		fa	$\pm 10 \times 10^{-6}$/year Max.	Ta=+25 °C ±3 °C
Shock resistance		S.R.	$\pm 10 \times 10^{-6}$ Max.	Nine drops on a concrete from 1500 mm

External dimensions

(Unit: mm)



NO.	Connection
2,5	IN/OUT
1,3,4,6	GND

Recommended soldering pattern

(Unit: mm)