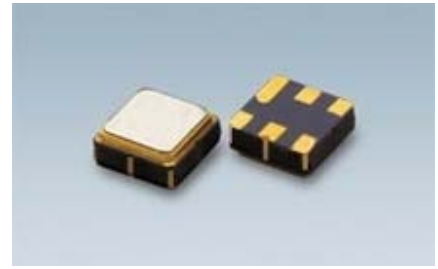


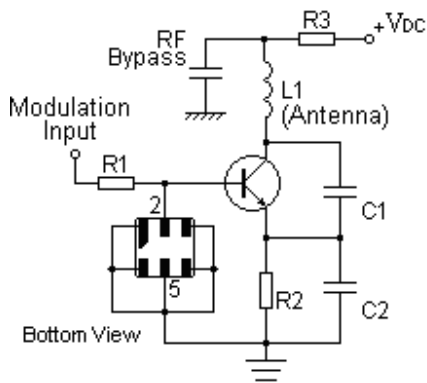
Features

- 1-port Resonator
- Ceramic Package for **Surface Mounted Technology (SMT)**
- **RoHS** compatible
- Package size 3.80x3.80x1.50mm³
- Package Code DCC6
- **Electrostatic Sensitive Device(ESD)**

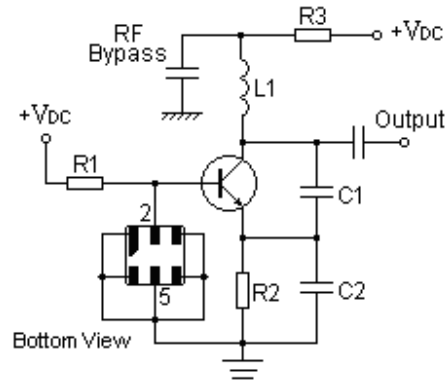


Application

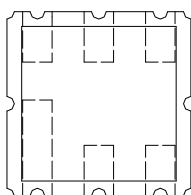
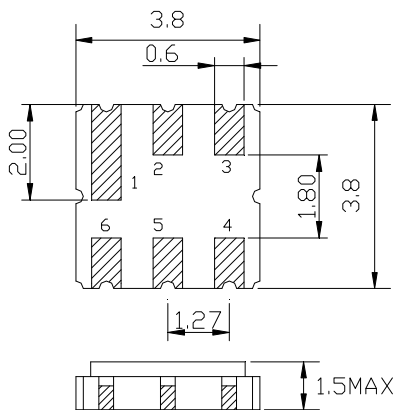
Typical Low-Power Transmitter Application



Typical Local Oscillator Application



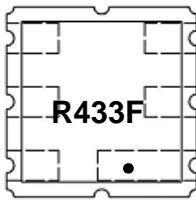
Package Dimensions (DCC6)



Pin Configuration

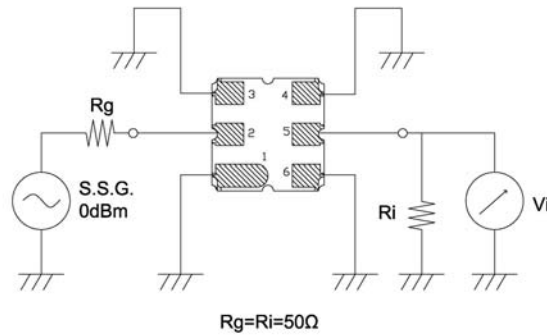
2	Input
5	Output
1,3,4,6	Ground

Marking

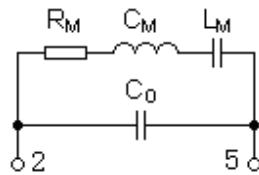


R	Manufacturer & SAW Resonator
433F	Part number

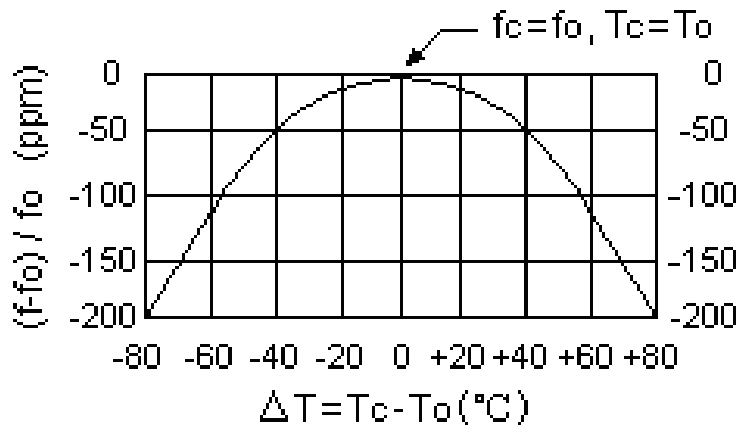
Test Circuit



Equivalent LC Model



Temperature Characteristics



The curve shown above accounts for resonator contribution only and does not include LC component temperature contributions.

Performance

Maximum Rating

Item		Value	Unit
DC Voltage	V_{DC}	10	V
Operation Temperature	T	-40 ~ +85	°C
Storage Temperature	T_{stg}	-55 ~ +125	°C
RF Power Dissipation	P	10	dBm

Electronic Characteristics

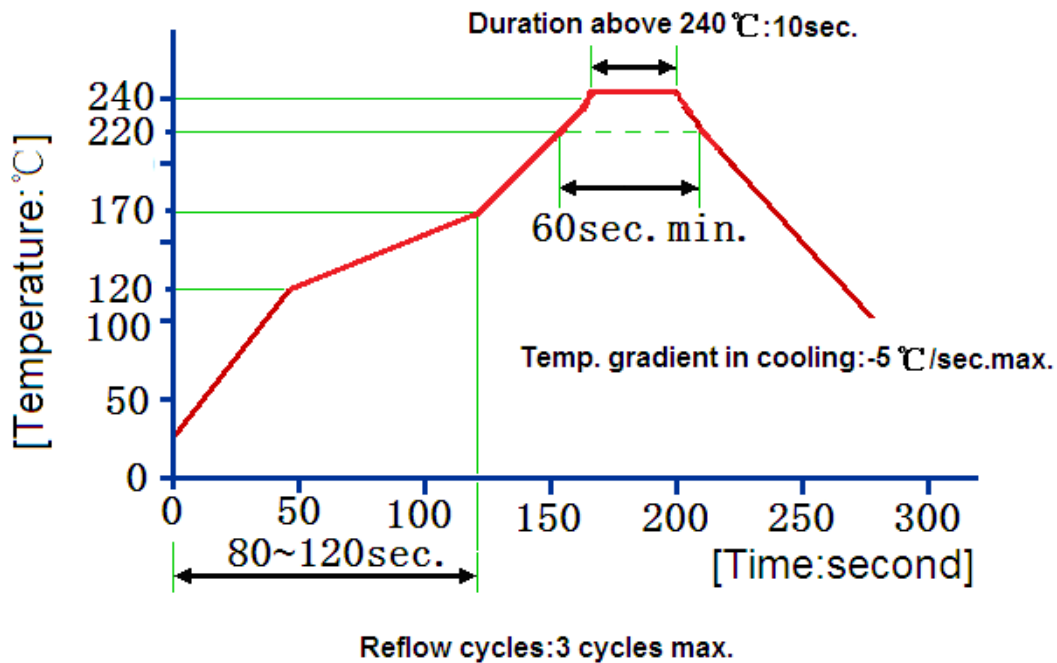
Test Temperature: $25^{\circ}\text{C} \pm 2^{\circ}\text{C}$

Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

Item			Minimum	Typical	Maximum	Unit
Center Frequency	Absolute Frequency	f_c		433.920		MHz
	Tolerance from 433.920MHz	Δf_c		± 75		KHz
Insertion Loss(min)		IL		1.6	2.0	dB
Quality Factor	Unloaded Q	Q_U		12451		
	50Ω Loaded Q	Q_L		1984		
Temperature Stability	Turnover Temperature	T_0	25	40	55	°C
	Turnover Frequency	f_0		f_c		
	Frequency Temperature Coefficient	FTC		0.032		ppm/°C
Frequency Aging	Absolute Value during the First Year	$ f_A $		≤ 10		ppm/yr
DC Insulation Resistance between Any Two Pins			1.0			MΩ
RF Equivalent RLC Model	Motional Resistance	R_M		19.5	25.5	Ω
	Motional Inductance	L_M		86.6	95.8	μH
	Motional Capacitance	C_M		1.55		fF
	Static Capacitance	C_0	1.80	2.25	2.80	pF

Recommended Reflow Soldering Diagram



Notes

1. As a result of the particularity of inner structure of SAW products, it is easy to be breakdown by electrostatic, so we should pay attention to **ESD protect** in the test.
2. **Static voltage** between signal load and ground may cause deterioration and destruction of the component. Please avoid static voltage.
3. **Ultrasonic cleaning** may cause deterioration and destruction of the component. Please avoid ultrasonic cleaning.
4. Only leads of component may **be soldered**. Please avoid soldering another part of component.
5. There is a close relationship between the device's performance and **matching network**. The specifications of this device are based on the test circuit shown above. L and C values may change depending on board layout. Values shown are intended as a guide only.