

Approved by

Checked by:

Issued by:

SPECIFICATION

Product: 1-port SAW Resonator

Model: NDR540

1.Feature

*1-port resonator

*Provides reliable, fundamental mode, quartz frequency Stabilization i.e. in transmitters or local oscillators

2.Terminals

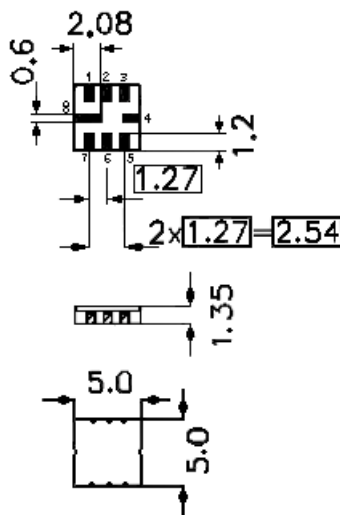
Ni,gold plated

3.Marking:

NDR540

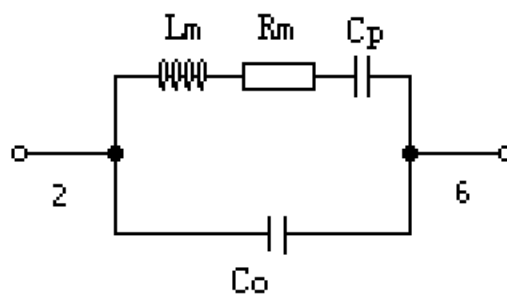
4.Package

Ceramic package QCC8C Dimensions in mm,approx.weight 0.1g



Pin configuration

2 input
6 output
4,8 Ground(case)



5. Performance

5-1. Maximum Rating

DC Voltage V_{DC}	$\pm 30V$
Case Temperature	$-45^{\circ}C$ to $+85^{\circ}C$
RF Power Dissipation	0 dBm

5-2. Electronic Characteristics

Reference temperature: $T_A = 25^{\circ}C$

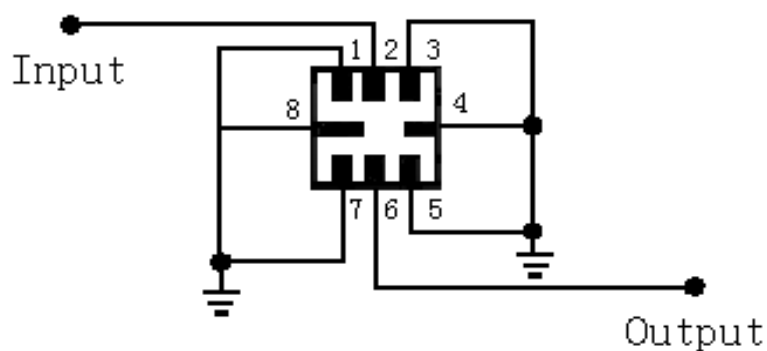
Terminating source impedance: $Z_S = 50 \Omega$

Terminating load impedance: $Z_L = 50 \Omega$

Characteristic		Sym	Minimu	Typical	Maximu	Units
Center Frequency (+25°C)	Absolute Frequency	f_c	433.345		433.495	MHz
	Tolerance from 433.42 MHz	Δf_c			± 75	kHz
Insertion Loss		IL		1.2	2.0	dB
Quality Factor	Unloaded Q	Q_U		12,800		
	50 Ω Loaded Q	Q_L		2,000		
Temperature Stability	Turnover Temperature	T_0	24	39	54	$^{\circ}C$
	Turnover Frequency	f_0		$f_c + 2.7$		kHz
	Frequency Temperature Coefficient	FTC		0.037		ppm/ $^{\circ}C^2$
Frequency Aging	Absolute Value during the First Year	FA		≤ 10		ppm/yr
DC Insulation Resistance between Any Two Pins			1.0			M Ω
RF Equivalent RLC Model	Motional Resistance	R_M		12	23	Ω
	Motional Inductance	L_M		85.481		μH
	Motional Capacitance	C_M		1.7124		fF
	Pin 1 to Pin 2 Static	C_o		2.4		pF

☺ CAUTION: Electrostatic Sensitive Device. Observe precautions for handling

6. Test Circuit



7. Typical Frequency Response

