

# Shoulder 好达

SHOULDER ELECTRONICS CO., LTD.

## SAW Components Data Sheet

PRODUCT 产品: SAW RESONATOR

MODEL NO 型号: HDR□□□D F11

PREPARED 编制:

CHECKED 审核:

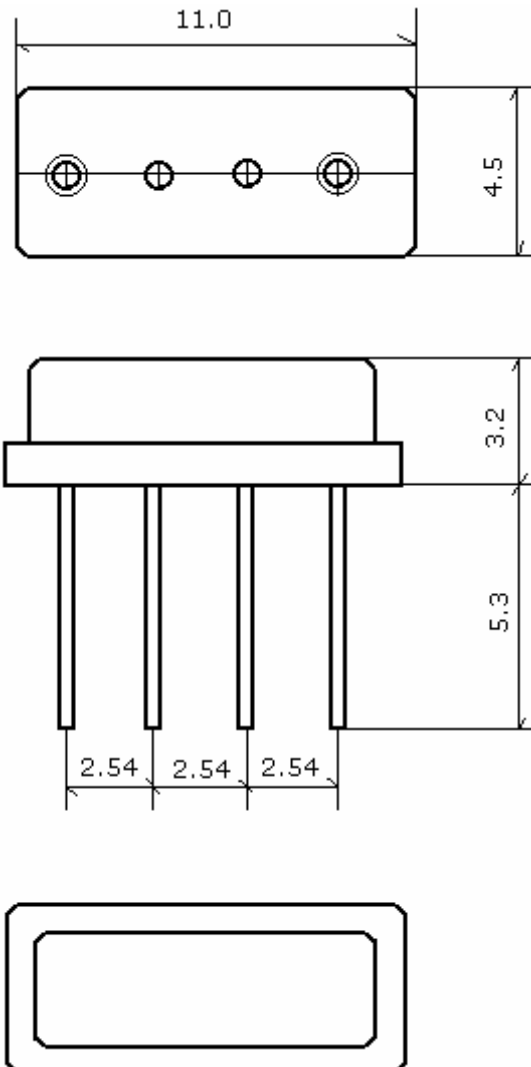
APPROVED 批准:

DATE 日期: 2007-01-25

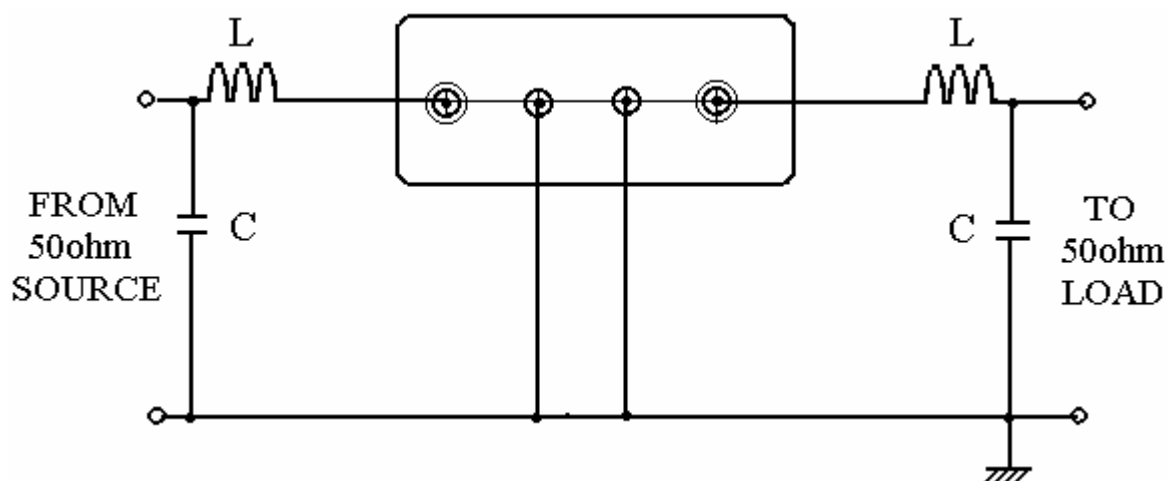
## 1.SCOPE

This specification is applied to a 2-PORT type SAW resonator designed for the stabilization of transmitters such as garage door openers and security transmitters.

## 2. DIMENSION



## 3. TEST CIRCUIT



## 4. Electrical characteristics

Part number	min	typ	max	unit	
Center Frequency	Table 1				
Insertion Loss		7.0	8.0	dB	
Quality Factor Unload Q		12.000			
50 $\Omega$ Loaded Q		6.300			
Temperature Stability	Turnover Temperature	36	51	66	$^{\circ}\text{C}$
	Turnover Frequency		$f_0 \pm 11$		KHz
	Freq.temp.Coefficient		0.037		ppm/ $^{\circ}\text{C}^2$
Frequency Aging		$< \pm 10$		ppm/ yr	
DC. Insulation Resistance	1.0			M $\Omega$	
RF Equivalent RLC Model	Motional Resistance R1		107	152	$\Omega$
	Motional Inductance L1		481.378		$\mu\text{H}$
	Motional Capacitance C1		0.2794		pF
Shunt Static Capacitance		1.3		pF	

**Table 1**

F <sub>0</sub> (MHz)	Frequency accuracy (KHz)	F <sub>0</sub> (MHz)	Frequency accuracy (KHz)
224.500	±75	414.000	±75
303.825	±75	418.000	±75
307.300	±75	423.220	±75
335.100	±75	433.420	±75
315.000	±75	434.920	±75
380.000	±75	437.000	±75
384.050	±75	447.000	±75
391.800	±75	479.000	±75
402.550	±75	824.250	±250
403.000	±75	868.500	±250