

FR W342

SAW Resonator – Remote Control
Specification (Rev 1)

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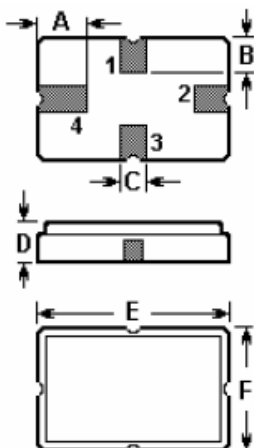
September 25th, 2005

Features

- ❑ SAW Resonator
- ❑ Quartz frequency stabilization
- ❑ Tolerance $\pm 75\text{kHz}$
- ❑ Ceramic package for Surface Mounted Technology

Package Drawing & Pin out

The product is in conformance with the European RoHs Regulation 2002/95.



Dimensions (unit: mm)

A	1.2
B	0.8
C	0.5
D	1.4
E	5.0
F	3.5

Pin Configuration

Input	1 or 3
Output	3 or 1
Case ground	2, 4

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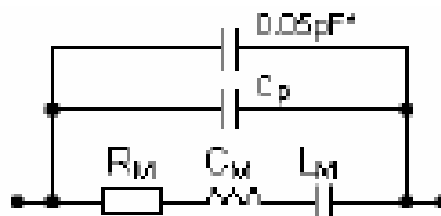
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Technical Characteristics

Reference Temperature : +25°C

Electrical Parameters	Unit	Minimum	Typical ⁽¹⁾	Maximum
Center Frequency f_c	MHz	-	345	-
Tolerance from f_c	kHz	-	-	±75
Insertion Loss	dB	-	1.5	2.2
Quality Factor				
Unloaded Q (Q_u)		-	10.02	-
50 W Loaded Q (Q_l)		-	1.6	-
Temperature Stability				
Turnover Temperature (T_0)	°c	25	-	55
Turnover Frequency (f_0)	kHz	-	Fc	-
Frequency Temperature Coefficient (FTC)	ppm/°c ²	-	0.032	-
Frequency Aging Absolute Value during the first Year $ f_A $	ppm/yr	-	< 10	
DC Insulation Resistance Between any Two Pins	MΩ	1.0	-	-
RF Equivalent RLC Model				
Motional Resistance (R_M)	Ω	-	19	29
Motional Inductance (L_M)	μH	-	87.8796	-
Motional Capacitance (C_M)	FF		2.4241	-
Shunt Static Capacitance (C_0)	pF	2.25	2.55	2.85

LC Model



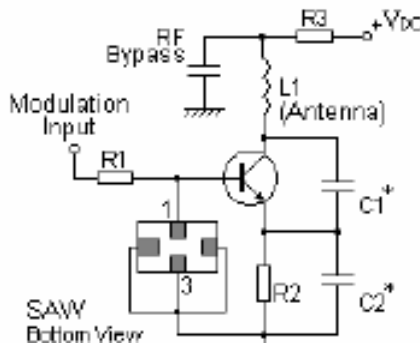
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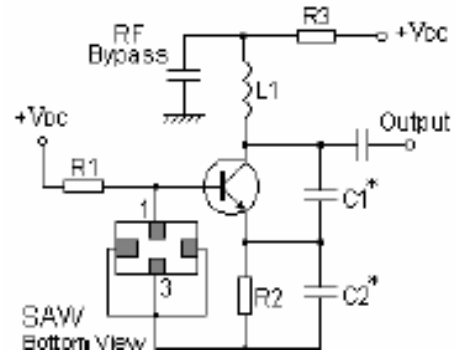
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Typical Applications

Low Power Transmitter

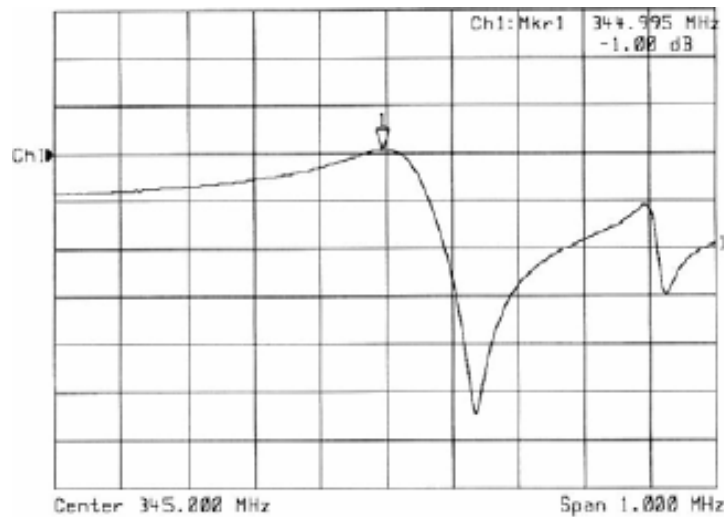


Local Oscillator



Nominal Frequency Response (Measurements)

Frequency Response





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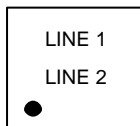
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Maximum Ratings

Storage Temperature Range	°C	[-40°C ; +85°C]
Operating Temperature	°C	[-10°C ; +60°C]
DC voltage between any two pins	V	± 30
CW RF Power Dissipation	dBm	0

Marking



Line 1: " FR NNNN" is the reference to Temex Part number

Line 2: RYWWZZ is the date code as:

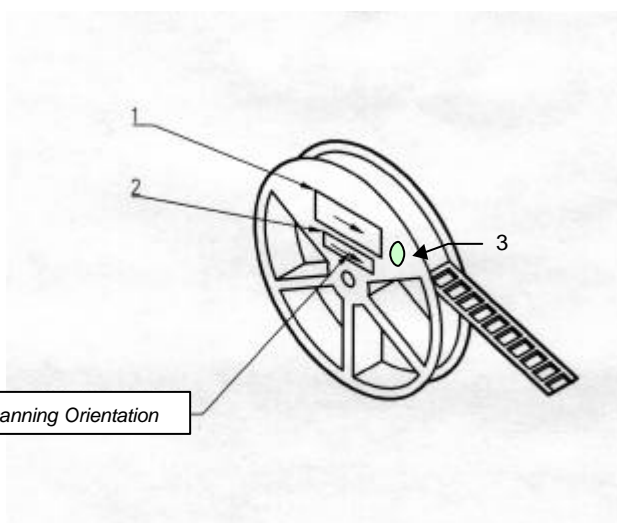
R: Partner identifier.

Y: last digit of the year.

WW: number of week in the year

ZZ: Lot number in the week (from AA to ZZ).

Packaging



- 1 – Temex Label
- 2 – ESD Prevention Label
- 3 – Pb Free Label