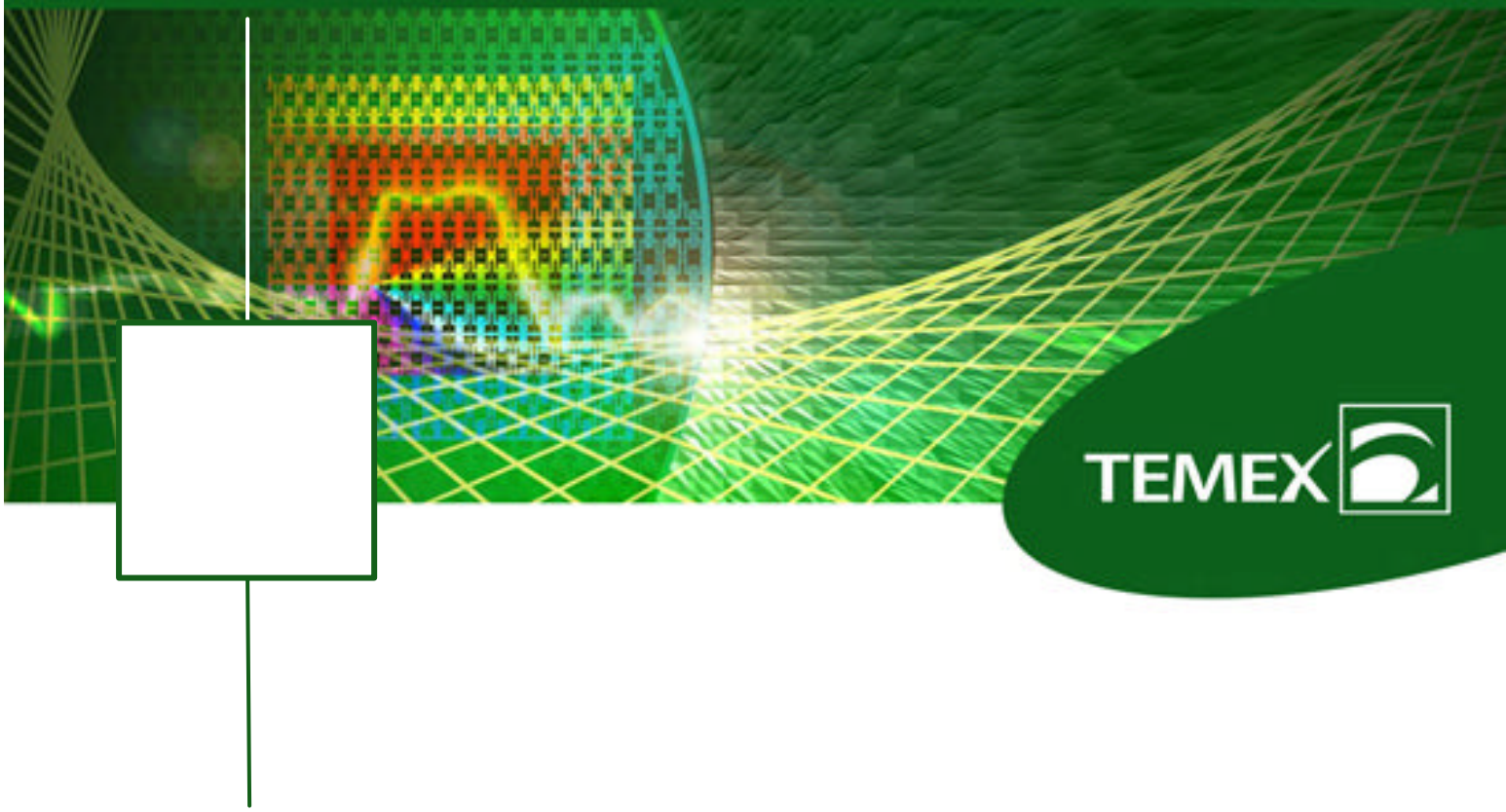
SAW Resonator



FR W341

SAW Resonator – Remote Control
Specification (Rev 1)

- Features..... P01
- Package Drawing & Pin out..... P01
- Technical Characteristics..... P02
- LC Model P02
- Typical Applications..... P03
- Nominal Response..... P03
- Maximum Ratings..... P04
- Marking & Packaging..... P04

FR W341

SAW Resonator – Remote Control

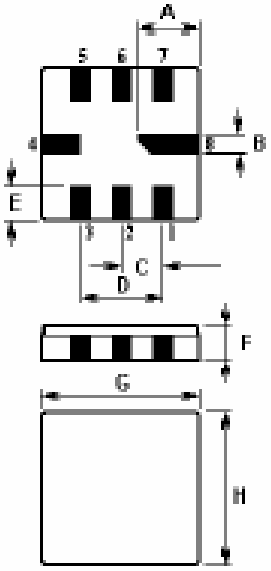
September 25th, 2005

Features

- SAW Resonator
- Quartz frequency stabilization
- Tolerance ±75kHz
- 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	2.8
B	0.6
C	1.27
D	2.54
E	1.2
F	1.35
G	5.0
H	5.0

Pin Configuration	
Input	2
Output	6
Case ground	4, 8

FR W341

SAW Resonator – Remote Control

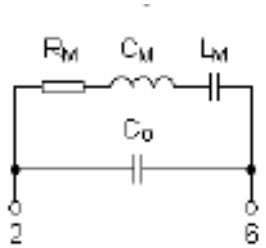
September 25th, 2005

Technical Characteristics

Reference Temperature : +25°C

Electrical Parameters	Unit	Minimum	Typical (1)	Maximum
Center Frequency fc	MHz	-	433.42	-
Tolerance from fc	kHz	-	-	±75
Insertion Loss	dB	-	1.5	2.4
Quality Factor				
Unloaded Q (Q_u)		-	10.6	-
50 Ω Loaded Q (Q_l)		-	2.2	-
Temperature Stability				
Turnover Temperature (T_0)	°c	25	-	55
Turnover Frequency (f_o)	kHz	-	fc	-
Frequency Temperature Coefficient (FTC)	ppm/°c^2	-	0.037	-
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	33
Motional Inductance (L_M)	µH	-	101.841	-
Motional Capacitance (C_M)	fF		1.3254	-
Shunt Static Capacitance (C_O)	pF	-	2.3	-

LC Model



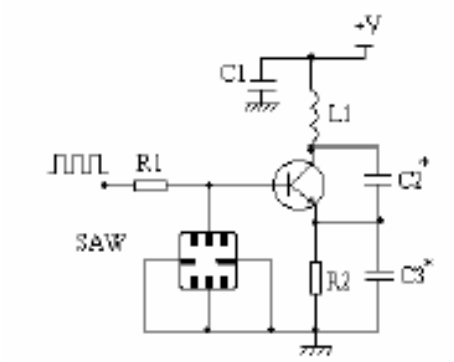
FR W341

SAW Resonator – Remote Control

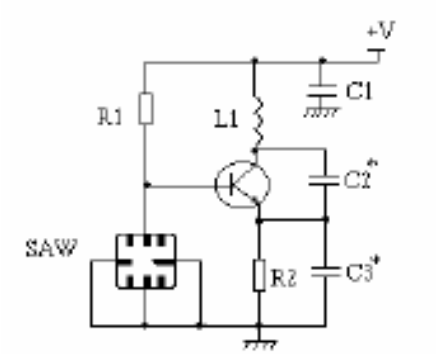
September 25th, 2005

Typical Applications

Telecontrol Circuitry

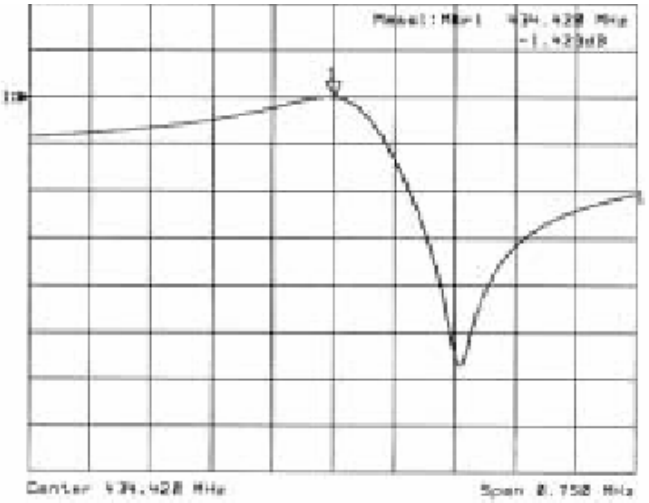


Local Oscillator



Nominal Frequency Response (Measurements)

Frequency Response



FR W341

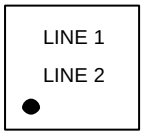
SAW Resonator – Remote Control

September 25th, 2005

Maximum Ratings

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

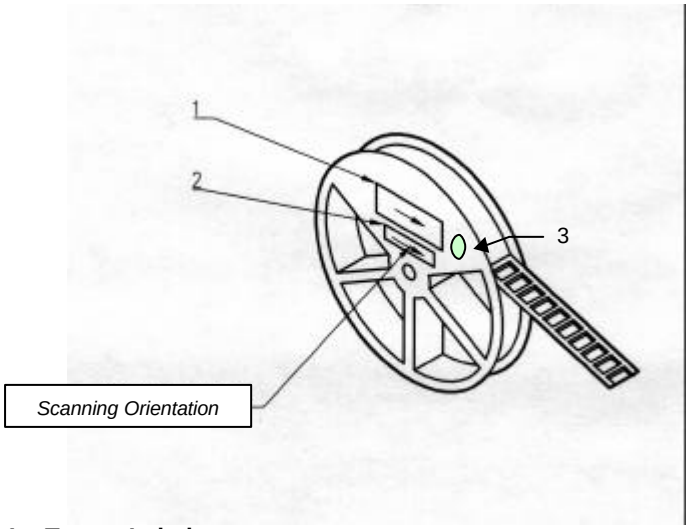
Marking



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