

APPROVAL SHEET

Approval Specification	Customer's Approval Certificate
TO:	Checked & Approved by:
Part No.:	Date:
Customer's Part No.:	Please return this copy as a certification of your approval

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Part No.	:	R310
Pages	:	4
Date	:	2016/8/1
Revision	:	2.0

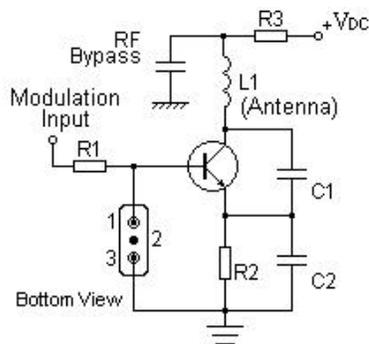
Features

- 1-port Resonator
- Metal Case for **D11**
- Package size 8.36x3.45x3.00 mm³
- **RoHS** compatible
- **Electrostatic Sensitive Device(ESD)**

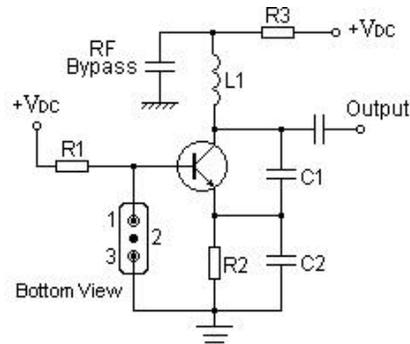


Application

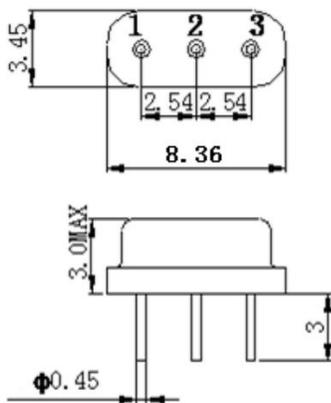
Typical Low-Power Transmitter Application



Typical Local Oscillator Application



Package Dimensions (D11)



Pin Configuration

1	Input/Output
3	Output/Input
2	Case Ground

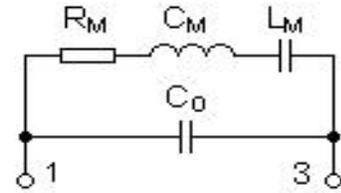
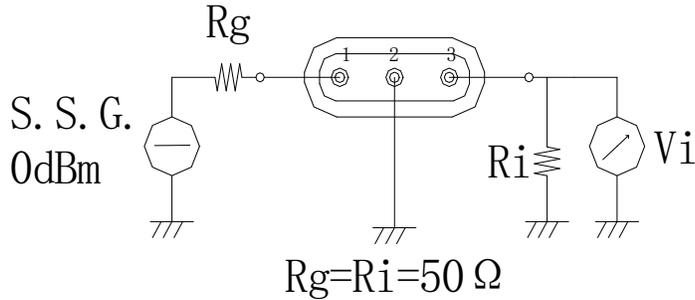
Marking



R	SAW Resonator
310	Part number

Test Circuit

Equivalent LC Model



Performance

Maximum Rating

Item		Value	Unit
DC Voltage	V_{DC}	± 30	V
Operation Temperature	T	-40 ~ +85	$^{\circ}C$
Storage Temperature	T_{stg}	-40 ~ +85	$^{\circ}C$
RF Power Dissipation	P	25	dBm

Electronic Characteristics

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

Terminating source impedance: 50Ω

Terminating load impedance: 50Ω

Item			Minimum	Typical	Maximum	Unit
Center Frequency	Absolute Frequency	f_c		310.00		MHz
	Tolerance from 310.00MHz	Δf_c		± 75		KHz
Insertion Loss(min)		IL		1.2	2.0	dB
Quality Factor	Unloaded Q	Q_U		17616		
	50Ω Loaded Q	Q_L		2141		
Frequency Aging	Absolute Value during the First Year	$ f_A $		≤ 10		ppm/yr
DC Insulation Resistance between Any Two Pins			1.0			M Ω
RF Equivalent RLC Model	Motional Resistance	R_M		13.8	20	Ω
	Motional Inductance	L_M		125		μH
	Motional Capacitance	C_M		2.11		fF
	Static Capacitance	C_0	3.99	4.29	4.59	pF

Frequency Response

