ECS-SDR1 Series

SMD ONE PORT SAW Resonator

Request a Sample

ECS-SDR1 Series

- Ideal for transmitter applications
- Quartz Stability
- Ultra-Miniature SMD Package
- Pb Free/RoHS Compliant

Operating Conditions/Electrical Characteristics

Parameters	Conditions	ECS-SDR1-3150			ECS-SDR1-4180			ECS-SDR1-4339			Units
		MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
Center Frequency	F_O	314.925	315.000	315.075	417.925	418.000	418.075	433.845	433.920	433.995	MHz
Frequency Tolerance				± 75			± 75			± 75	kHz
Insertion Loss	IL		1.4	2.0		1.6	2.0		1.4	1.8	dB
Quality Factor	Unloaded Q		10,750			11,400			9,200		Q
	50Ω Loaded Q		1,600			1,900			1,200		Q
Temperature Stability	Temperature Coefficient		0.032			0.032			0.032		ppm/°C
Turnover Temperature	T_0	25		55	25		55	15		45	°
Frequency Aging	fA		≤10			≤10			≤10		ppm/Yr
DC Insulation Resistance		1.0			1.0			1.0			MΩ
Motional Resistance	R_1		17.5	26		20	26		15	23	Ω
Motional Inductance	L_1		95.0359			86.8558			50.6419		µH
Motional Capacitance	C_1		2.6889			1.6708			2.6592		fF
Shunt Capacitance	C_0	1.8	2.0	2.2	1.7	2.0	2.3	2.3	2.6	2.9	pF
Operating Temperature	T_{OPR}	-40		+85	-40		+85	-40		+85	°C
Storage Temperature	T_{STR}	-40		+85	-40		+85	-40		+85	°C

PART NUMBERING GUIDE: "Example" ECS-DR1-3150-TR

Manufacturer		Part Series		Frequency Abbreviation (315.000 MHz)		Tape & Reel (1K)
ECS	-	DR1	-	3150	-	TR

Rev.2018

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DIMENSIONS (mm)

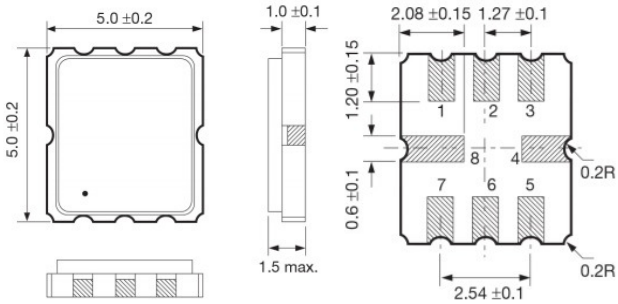

Figure 1) *Top, Side, End and Bottom views*

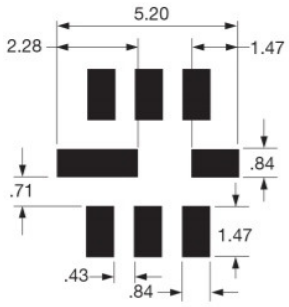

Figure 2) *Land Pattern*

Pin Connections	
#1	No Connect
#2	Input
#3	No Connect
#4	Ground
#5	No Connect
#6	Output
#7	No Connect
#8	Ground

SOLDER PROFILE
Peak solder Temp +260°C Max 10 sec Max.
2 Cycles Max.
MSL 1, Lead Finish: Au

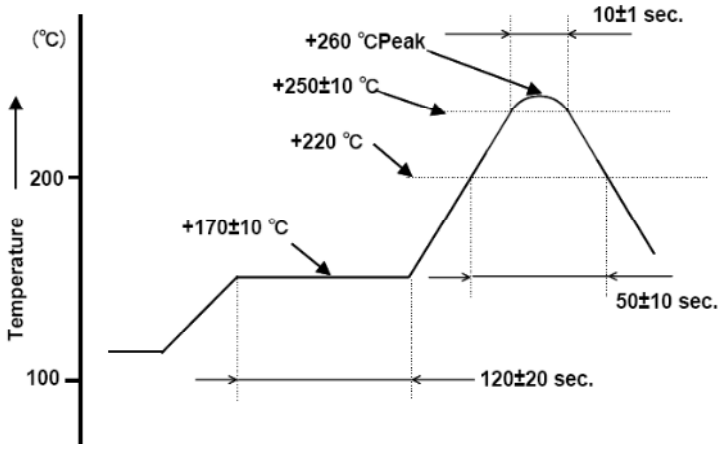

Figure 1) *Suggested Solder Profile*