

### 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	$F_0$	314.925	315.000	315.075	417.925	418.000	418.075	433.845	433.920	433.995	MHz
Frequency Tolerance				$\pm 75$			$\pm 75$			$\pm 75$	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
	50 $\Omega$ Loaded Q		1,600			1,900			1,200		Q
Temperature Stability	Temperature Coefficient		0.032			0.032			0.032		ppm/ $^{\circ}$ C
Turnover Temperature	$T_0$	25		55	25		55	15		45	$^{\circ}$
Frequency Aging	fA		$\leq 10$			$\leq 10$			$\leq 10$		ppm/Yr
DC Insulation Resistance		1.0			1.0			1.0			M $\Omega$
Motional Resistance	$R_1$		17.5	26		20	26		15	23	$\Omega$
Motional Inductance	$L_1$		95.0359			86.8558			50.6419		$\mu$ H
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	$^{\circ}$ C
Storage Temperature	$T_{STR}$	-40		+85	-40		+85	-40		+85	$^{\circ}$ C

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

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

**DIMENSIONS (mm)**

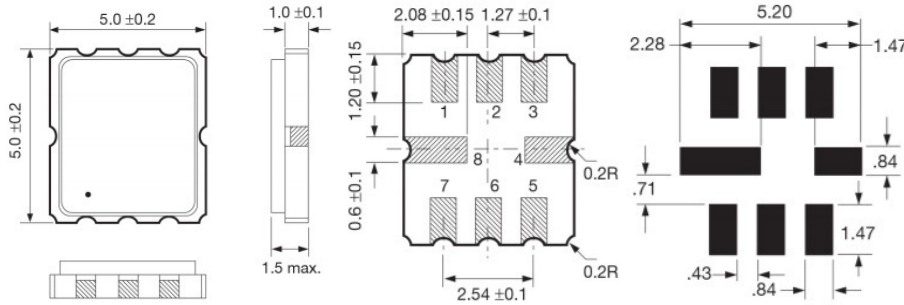


Figure 1) Top, Side, End and Bottom views

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

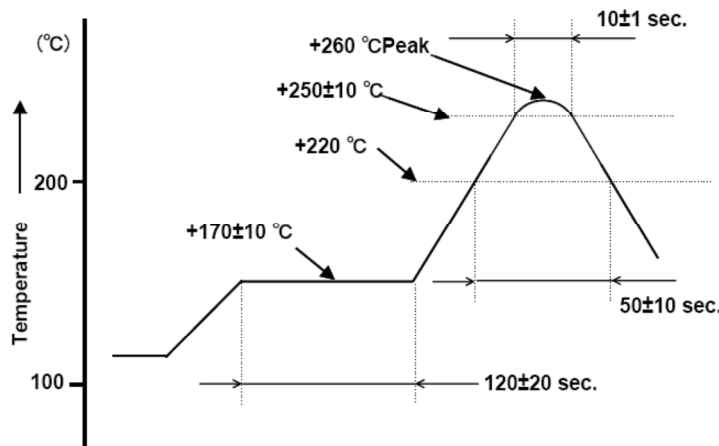


Figure 1) Suggested Solder Profile

## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Resonators](#) category:*

*Click to view products by [ECS Inc](#) manufacturer:*

Other Similar products are found below :

[B39431R820H210](#) [ECS-HFR-40.00-B-TR](#) [CSTLS4M00G53Z-A0](#) [ECS-CR2-16.00-A-TR](#) [ECS-HFR-20.00-B-TR](#) [ECS-CR2-20.00-A-TR](#)  
[RO3164E-3](#) [CSTNE16M0V510000R0](#) [CSTNE14M7V510000R0](#) [AWSCR-4.19CRLB-C15-T3](#) [AWSCR-4.91CRLB-C15-T3](#) [AWSCR-5.00CPLB-C30-T4](#) [CSTNE8M00GH5C060R0](#) [9AC04194152080D2JB](#) [CSTCR4M91G55B-R0](#) [FC-12M32.768KHZ9PF20PPM](#)  
[7Y032768NW2](#) [ASR433.42E-T](#) [146-32.768-12.5-20-20/A](#) [ZTA 3.68MG](#) [X1A000091000500](#) [X1A0000910001](#) [AWSCR-25.00CW-T](#)  
[AWSZT-12.00MWD-T](#) [ECS-SR1-4.19-B-TR](#) [7C024000HW1](#) [7C012000IW1](#) [7C012000MW1](#) [7C016000HW1](#) [7C016000MW1](#)  
[7C032000IW1](#) [7C016000RW1](#) [7C026000MW1](#) [7C040000HW1](#) [7C012000RW1](#) [7C024000MW1](#) [7C026000HW1](#) [7C024576RW1](#)  
[X201632MKB4SI](#) [7C027000MW1](#) [7E25000E18UCG](#) [7E50000E18UCG](#) [XYCCCLNANF-16.000000MHZ](#) [XYDBPCNANF-12MHZ](#)  
[XYDBBCNANF-16.000000MHZ](#) [XYDBBCNANF-24.000000MHZ](#) [XYHCCLNANF-24.000000MHZ](#) [XYBBCLNANF-26.000000MHZ](#)  
[CM4012M00020T8188026](#) [CM4016M00009T8188027](#)