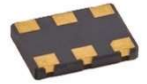
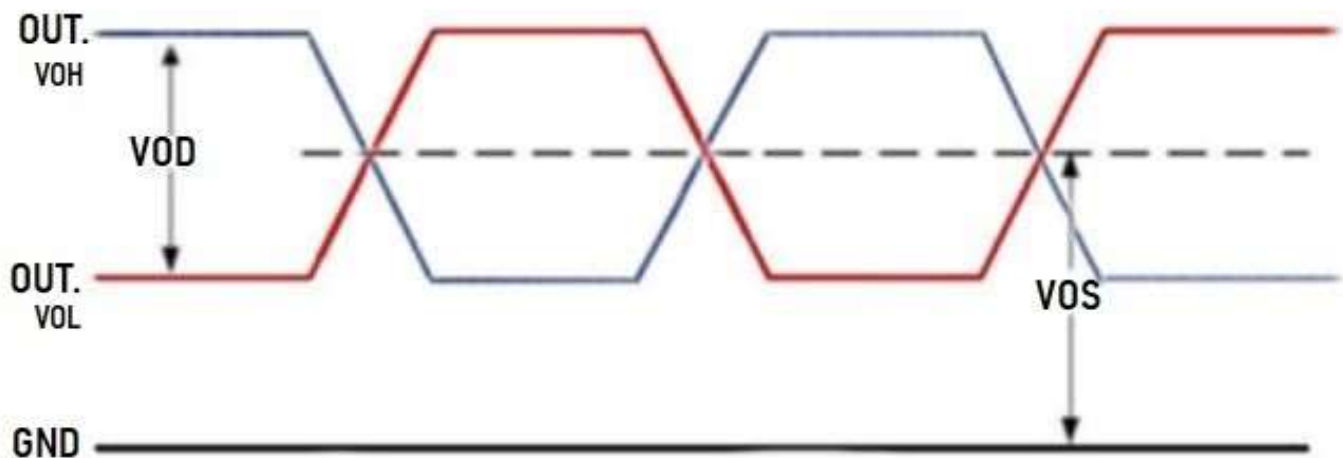


ELECTRICAL SPECIFICATION

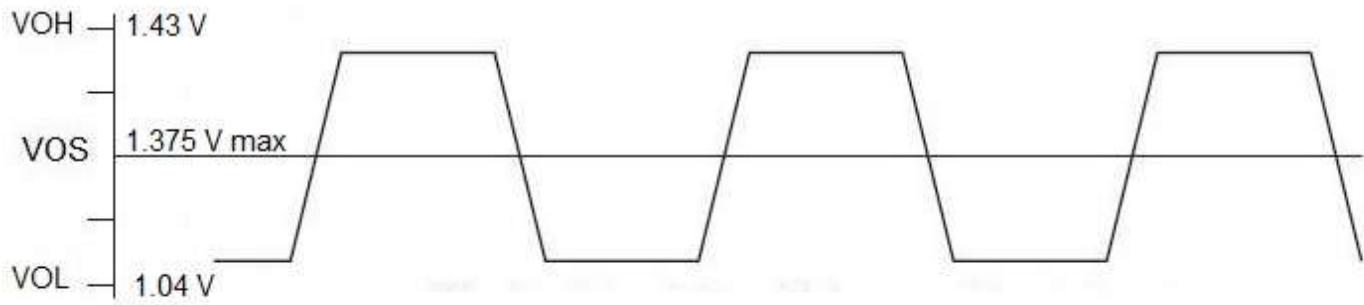


PARAMETERS	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	fo	Ta=25°C	156.250	MHz
Supply Voltage	V _{CC}	V _{CC} ±5%	2.5 to 3.3	VDC
Supply Current, max	I _s	V _{CC} ; Ta=+25°C;	40	mA
Operating Temperature Range	T _a	---	-40 to +85	°C
Storage Temperature Range	T _(stg)	Absolute max	-55 to +125	°C
Output Logic Type	---		LVDS	
Overall Freq. Stability, max.	Δf/fo	Inclusive of 25°C Tolerance, Changes due to Operating Temperature, 10 years Aging	±20 ⇄	ppm
Output Voltage	V _{OL}	V _{OL} , min	0.8	V
	V _{OH}	V _{OH} , max	1.6	V
Differential Output Voltage	V _{OD}	V _{OD} min/max	247 / 454	mV
Common Mode Output Voltage	V _{OS}	V _{OS} min/max	1.125 / 1.375	V
Output Load	---	Connected between Out and Complementary Out	100	Ω
Enable / Disable Function	E/D	Pin 1: N.C. (Open) or High (0.7 x V _{CC})	Pin 4 & 5 – Oscillation (Enabled)	
		Pin 1: Low (0.3 x V _{CC})	Pin 4 & 5 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% V _{DD}	45 to 55	%
Rise Time and Fall Time, max	t _r / t _f		400	ps
Jitter, RMS, max.	J	@12kHz ~ 20MHz	0.125 / 0.3	ps

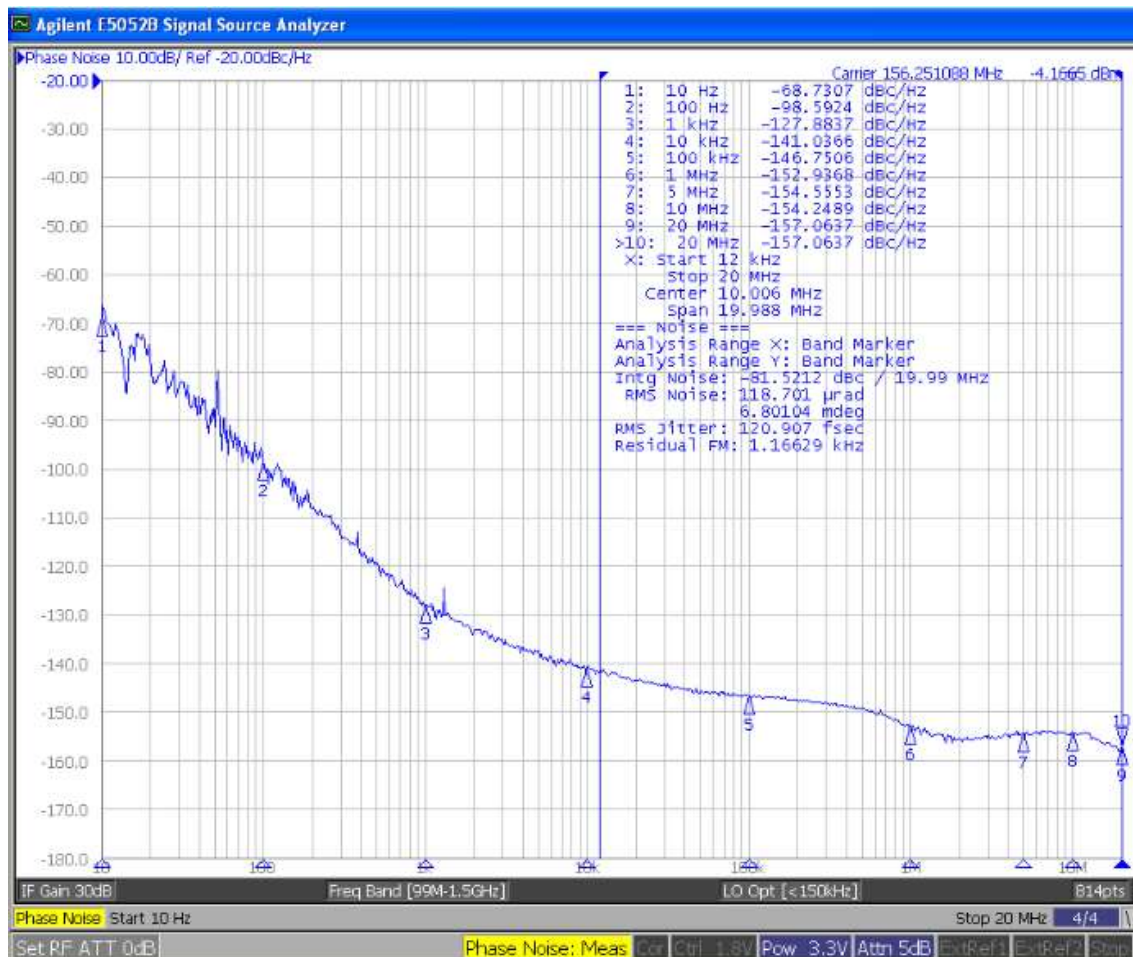
WAVEFORM DIAGRAM



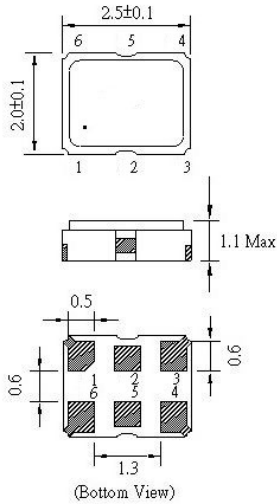
LVDS TYPICAL OUTPUT LEVEL



■ PHASE NOISE



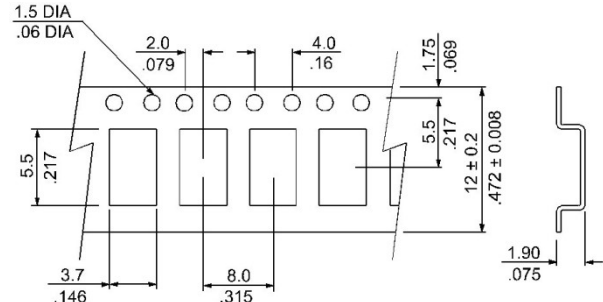
MECHANICAL SPECIFICATION



Pin Connections

- 1 – Enable / Disable
- 2 – NC
- 3 – Ground
- 4 – Output
- 5 – Complimentary Output
- 6 – Vcc

CARRIER TAPE DIMENSIONS

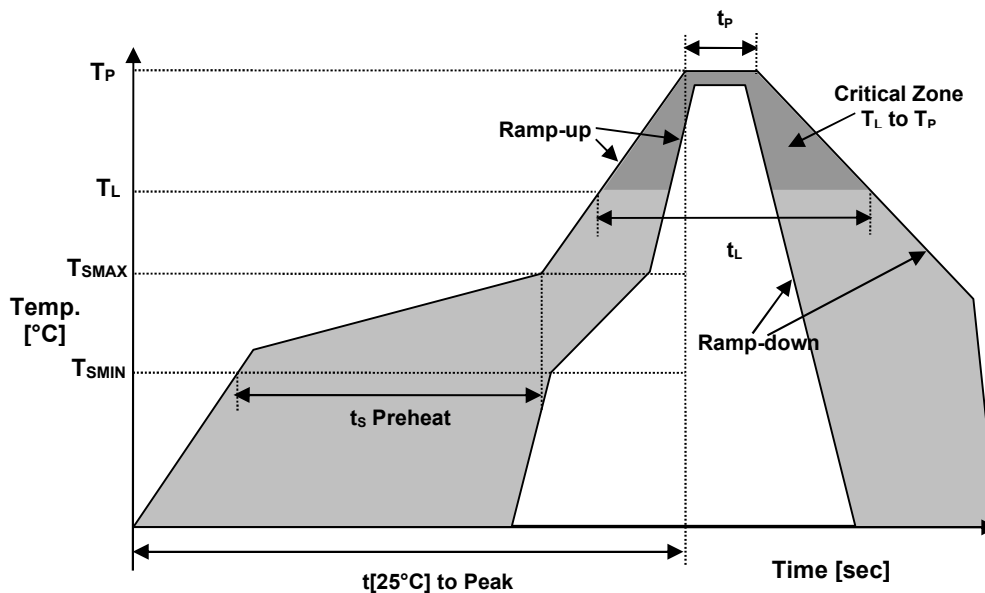


NOTE: REFER TO EIA-481 FOR DIMENSIONS NOT LISTED

PACKAGING

- 178 mm REEL DIAMETER
- 12 mm TAPE WIDTH, 8 mm PITCH
- QUANTITY: 3000 PIECES PER REEL

REFLOW PROFILE



Reflow profile		
Temperature Min Preheat	T_{SMIN}	150°C
Temperature Max Preheat	T_{SMAX}	200°C
Time (T_{SMIN} to T_{SMAX})	t_S	60-180 sec.
Temperature	T_L	217°C
Peak Temperature	T_P	260°C
Ramp-up rate	R_{UP}	3°C/sec max.
Ramp-down rate	R_{DOWN}	6°C/sec max.
Time within 5°C of Peak Temperature	t_P	10 sec.
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.
Time	t_L	60-150 sec.

ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH-SVHC	Compliant
HALOGEN-FREE	Compliant
TERMINATION FINISH	Au



MARKING

Rx156.2
•LBDEyw

x – Internal Production ID code
y – Year code
w – Week code

YEAR CODE	
Year	Code
2015	5
2016	6
2017	7
2018	8
2019	9
2020	0
2021	1
2022	2
2023	3
2024	4
2025	5

ALPHA WEEK CODE TABLE					
Week	Code	Week	Code	Week	Code
1	a	19	s	37	K
2	b	20	t	38	L
3	c	21	u	39	M
4	d	22	v	40	N
5	e	23	w	41	O
6	f	24	x	42	P
7	g	25	y	43	Q
8	h	26	z	44	R
9	i	27	A	45	S
10	j	28	B	46	T
11	k	29	C	47	U
12	l	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	X
15	o	33	G	51	Y
16	p	34	H	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

RALTRON	
DRAWN BY:	CP, January 20, 2020
APPROVED BY:	Jl, January 20, 2020
REVISION:	A, Initial Release B, CP April 15, 2020 Updated to the current specs level C, CP August 20, 2020 Updated the marking D, AR, August 26, 2020 Updated Waveform Diagram E, Updated reel qty KJ 10-12-2022