

CLOCK OSCILLATOR

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COM11805-12.000-EXT-T-TR

ELECTRICAL SPECIFICATION

PARAMETER	SYMBOL	CONDITIONS	VALUE	UNIT
Nominal Frequency	fo	Ta=25°C	12.000	MHz
Supply voltage range	V _{cc}		1.8	VDC
Supply current, max	I _S	Ta=25°C	3.5	mA
Operating temperature	Ta		-40 ~ +85	°C
Storage temperature	T _(stg)	Absolute max	-55 ~ +125	°C
Frequency Tolerance	Δf/fo	Inclusive of 25°C Tolerance and Changes due to Operating Temperature, Supply Voltage, Load, Aging, Shock and Vibration	±50	ppm
Output Voltage	Vol	Logic "0" Level	0.1 x Vcc	VDC
	Voн	Logic "1" Level	0.9 x Vcc	VDC
Output Load		CMOS Output	15	pF
Enable / Disable	E/D	Pin 1: N.C. (Open) or High	Pin 3 – Oscillation (Enabled)	
Function	E/D	Pin 1: Low	Pin 3 – High Impedance (Disabled)	
Symmetry (Duty Cycle)	DC	@50% Vdd	45 to 55	%
Rise Time and Fall Time	tr / tf	@10% to 90% Vdd	6.5	ns
Stand-by Current	I _(std)	10		μA
Start up time, Max	ts	$V_{OUT} \ge 90\% V_{P-P}$ 10		ms

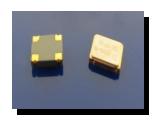
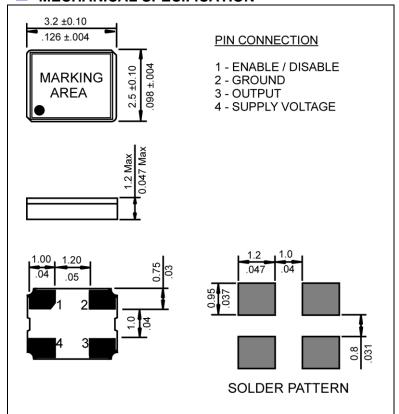


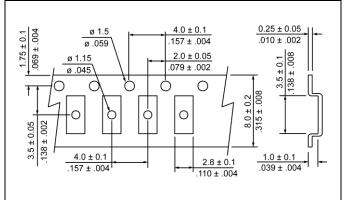
Photo is not actual part

MECHANICAL SPECIFICATION



NOTE: A capacitor of 0.01 µF between Vcc and Ground is recommended

CARRIER TAPE DIMENSIONS



NOTE: REFER TO EIA-481 FOR DIMENSIONS

PACKAGING

178 mm REEL DIAMETER 8 mm TAPE WIDTH, 4 mm PITCH QUANTITY: 3000 PIECES PER REEL

IN ACCORDANCE WITH EIA-481

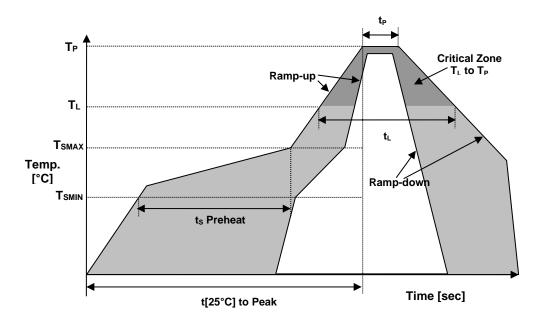


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■ REFLOW PROFILE



	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. max.
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
RoHS2	6/6 COMPLIANT & LEAD FREE
REACH-SVHC	COMPLIANT
HALOGEN-FREE	COMPLIANT
TERMINATION FINISH	Au





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MARKING

Rx12.00 •18BEyw

x – Internal Production ID code

y – Year code

w – Week code

YEAR CODE		
Year	Code	
2011	1	
2012	2	
2013	3	
2014	4	
2015	5	
2016	6	
2017	7	
2018	8	
2019	9	

	ALPHA WEEK CODE TABLE				
Week	Code	Week	Code	Week	Code
1	а	19	S	37	K
2	b	20	t	38	L
3	С	21	u	39	М
4	d	22	٧	40	N
5	е	23	W	41	0
6	f	24	Х	42	Р
7	g	25	У	43	Q
8	h	26	Z	44	R
9	i	27	Α	45	S
10	j	28	В	46	Т
11	k	29	С	47	U
12	I	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	Х
15	О	33	G	51	Υ
16	р	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

	RALTRON
DRAWN BY:	KJackson, November 20, 2015
APPROVED BY:	KJackson, November 20, 2015
REVISION:	A, Initial Release
	B, Redrawn & Corrected dimensions of pads; added Carrier Tape Dimensions and Packaging, F. Parra, 15 December 2015

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