

ISSUE	January 6, 2004
REVISION	001
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APPROVAL SHEET

CUSTOMER	INTEL
PRODUCT NAME	CRYSTAL
CUSTOMER'S PN	A93545-056
RALTRON'S PN	AS-25.000-20-SMD-TR-NS6



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1 GENERAL PART

1.1 TYPE	AS-SMD (Pb Free, RoHS Compliant)
1.2 NOMINAL FREQUENCY	25.000 MHz
1.3 MODE OF OSCILLATION:	FUNDAMENTAL
1.4 FREQUENCY STABILITY AT 25°C:	±30 PPM MAX
1.5 FREQUENCY STABILITY OVER TEMPERATURE RANGE:	±30 PPM MAX
1.6 AGING:	±5 PPM PER YEAR MAX
1.7 MARKING	
1.7.1 MANUFACTURE CODE	



2 SPECIFICATIONS

2.1 ELECTRICAL SPECIFICATIONS

2.1.1 STORAGE TEMPERATURE RANGE:	-40°C TO +85°C
2.1.2 OPERATING TEMPERATURE RANGE:	0°C TO +70°C
2.1.3 LOAD CAPACITANCE:	20 pF
2.1.4 SHUNT CAPACITANCE:	6 pF MAX
2.1.5 EQUIVALENT SERIES RESISTANCE:	20 Ω MAX
2.1.6 DRIVE LEVEL:	0.50 mW MAX, 0.1 mW TYP.

2.2 ENVIRONMENTAL CHARACTERISTICS

ITEM	METHOD & CONDITION
2.2.1 Mechanical Shock	100g, 6 msec per MIL-STD-202, Meth. 213, T/C C.
2.2.2 Mechanical Vibration	10g peak per MIL-STD-202, Meth. 204, T/C A
2.2.3 Leak Test	Hermetically sealed per MIL-STD-883, Meth. 1014
2.2.3 Resistance to Solder Heat	Lead free profile at +260C peak for 10 sec max.
2.2.4 Solderability	Per MIL-STD-202, Meth 208.
2.2.5 Temperature Cycling	MIL-STD-883, Meth 1010, T/C A
2.2.6 Storage Temperature	-40°C to +85°C.

2.3 MEASURE USING LOW FREQUENCY CRYSTAL TEST SYSTEM:

- 2.3.1 SAUNDERS AND ASSOCIATES MODEL 140B OR 250/C-LF, OR EQUIVALENT

2.4 CLASSIFICATION

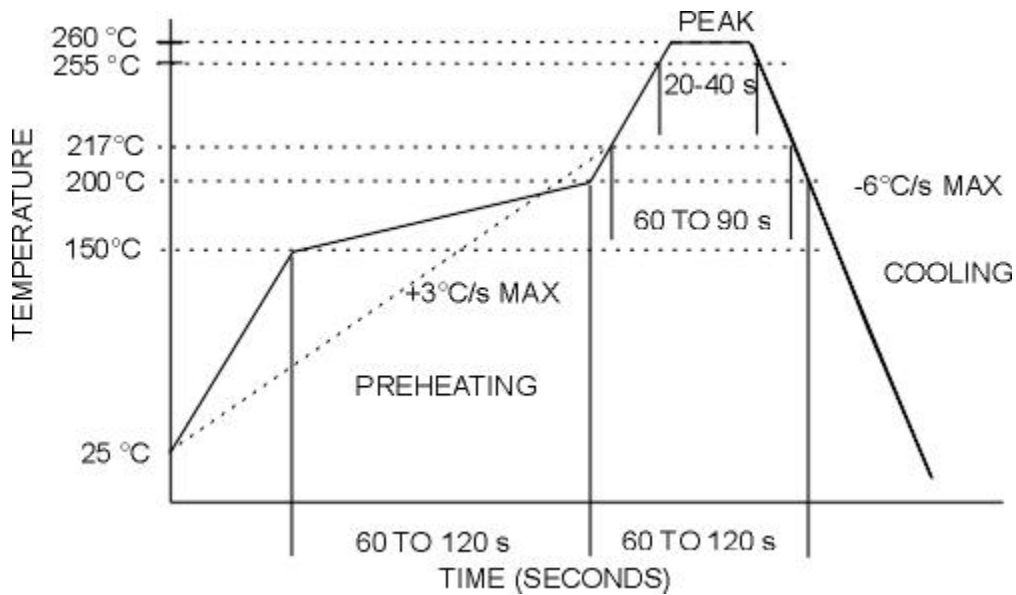


MARKING:
R250XA5a

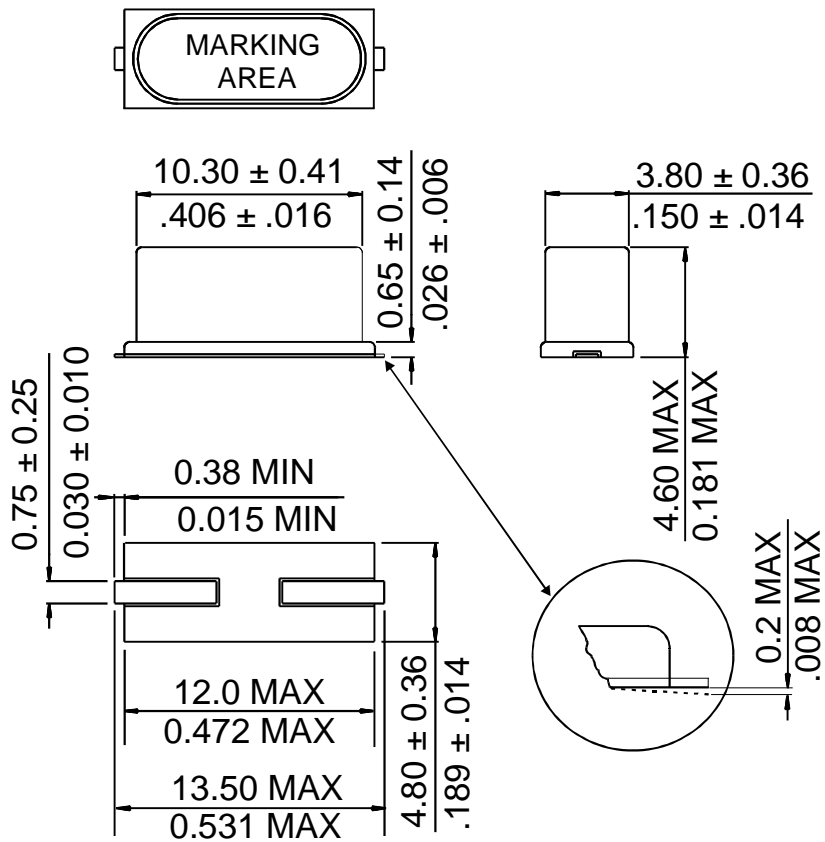
2.5 SOLDERING CONDITIONS (TERMINAL SOLDERING ONLY):

- 2.5.1 WAVE SOLDER: 260°C MAX, 10 SECONDS DURATION MAX
2.5.2 HAND SOLDER: 350°C MAX, 3 SECONDS MAX

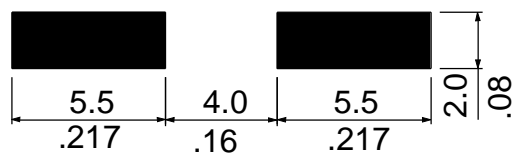
2.6 REFLOW SOLDERING PROFILE



2.7 OUTLINE DRAWINGS

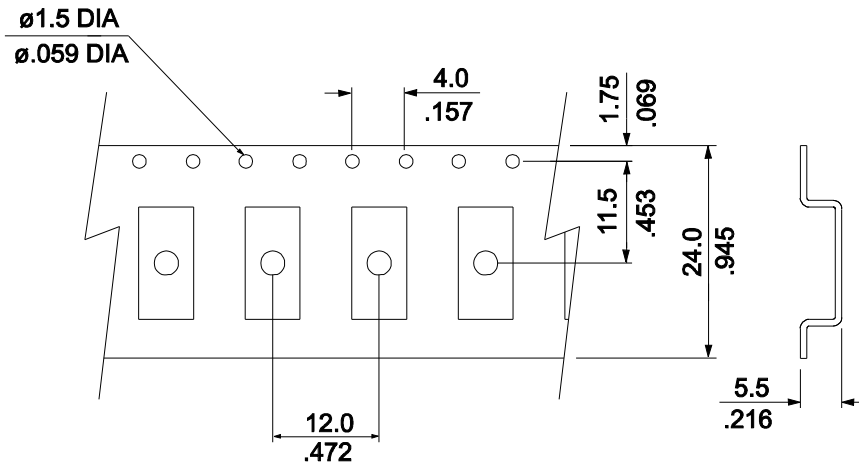


2.8 RECOMMENDED SOLDER PATTERN



2.9 PACKAGING

2.9.1 TAPING



330 mm REEL DIAMETER
24 mm TAPE WIDTH
12 mm PITCH
1000 PIECES PER REEL

2.10 MARKING

R250XA5a

R	RALTRON
250	25.000 MHz
X	PRODUCTION CODE
A	20 pF LOAD
5	YEAR CODE
a	WEEK CODE

YEAR CODE

Year	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Year Code	0	1	2	3	4	5	6	7	8	9	0	1

WEEK CODE

WEEK	01	02	03	04	05	06	07	08	09	10	11	12
WEEK Code	a	b	c	d	e	f	g	h	i	j	k	l
WEEK	13	14	15	16	17	18	19	20	21	22	23	24
WEEK Code	m	n	o	p	q	r	s	t	u	v	w	x
WEEK	25	26	27	28	29	30	31	32	33	34	35	36
WEEK Code	y	z	A	B	C	D	E	F	G	H	I	J
WEEK	37	38	39	40	41	42	43	44	45	46	47	48
WEEK Code	K	L	M	N	O	P	Q	R	S	T	U	V
WEEK	49	50	51	52	53							
WEEK Code	W	X	Y	Z	None							

3 REVISION HISTORY

001. April 6, 2005. Ammended Raltron PN from LF to NS6.