

SURFACE MOUNT CRYSTAL

Page 1 of 3

R2520-12.000-12-3030-EXT-TR Rev B

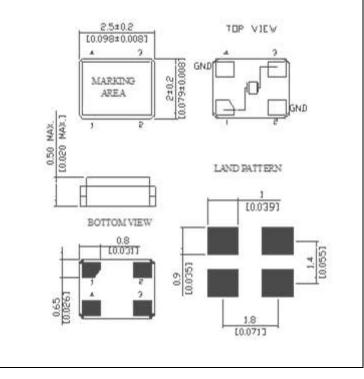
SPECIFICATIONS

PARAMETER	VALUE
NOMINAL FREQUENCY	12.000 MHz
MODE OF OSCILLATION	Fundamental
FREQUENCY TOLERANCE AT 25°C	±30 ppm max
FREQUENCY STABILITY OVER TEMPERATURE	±30 ppm max
OPERATING TEMPERATURE RANGE	-40°C to +85°C
STORAGE TEMPERATURE RANGE	-40°C to +85°C
AGING	±3 ppm per year max
LOAD CAPACITANCE	12 pF
EQUIVALENT SERIES RESISTANCE	180 Ω
SHUNT CAPACITANCE	5 pF max
DRIVE LEVEL	100 μW max
REFLOW CONDITIONS	260°C for 10 sec max

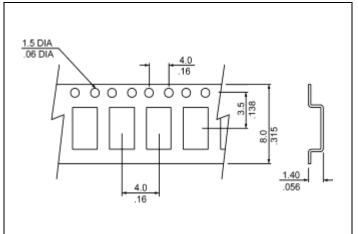


Photo is not actual part

MECHANICAL SPECIFICATION



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

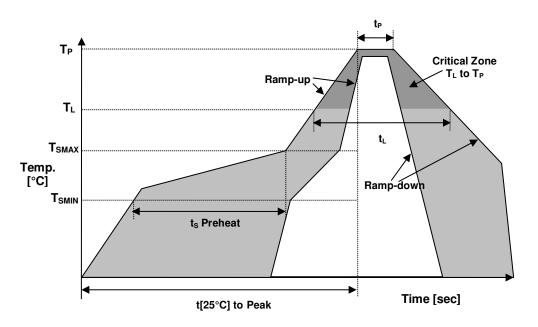


SURFACE MOUNT CRYSTAL

Page 2 of 3

R2520-12.000-12-3030-EXT-TR Rev B

REFLOW PROFILE



Reflow profile				
Temperature Min Preheat T _{SMIN} 150°C				
Temperature Max Preheat	T _{SMAX}	200°C		
Time (T _{SMIN} to T _{SMAX})	ts	60-180 sec.		
Temperature	TL	217°C		
Peak Temperature	T _P	260°C		
Ramp-up rate	Rup	3°C/sec max.		
Ramp-down rate	R _{DOWN}	6°C/sec max.		
Time within 5°C of Peak Temperature	tP	10 sec.		
Time t[25°C] to Peak Temperature	t[25°C] to Peak	480 sec.		
Time	t∟	60-150 sec.		

• ENVIRONMENTAL

PARAMETER	VALUE
MOISTURE SENSITIVITY LEVEL	1
RoHS	Compliant
REACH SVHC	Compliant
HALOGEN-FREE	Compliant
ESD CLASSIFICATION LEVEL	N/A
TERMINATION FINISH	Au





SURFACE MOUNT CRYSTAL

Page 3 of 3

R2520-12.000-12-3030-EXT-TR Rev B

MARKING

R12.00 xxJyw

xx - 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	v	40	Ν
5	e	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	А	45	S
10	j	28	В	46	Т
11	k	29	С	47	U
12	1	30	D	48	V
13	m	31	E	49	W
14	n	32	F	50	Х
15	0	33	G	51	Y
16	р	34	Н	52	Z
17	q	35	I		
18	r	36	J		

APPROVAL

DRAWN BY	KJackson, February 23, 2017
APPROVED BY	Jlvens, February 23, 2017
REVISION	A, Initial Release
	B, Updated to current spec levels KJ 5/14/19

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