

## Marketing Bulletin

**DATE:** Janaury 11<sup>th</sup>, 2006  
**TO:** All Sales Personnel  
**FROM:** Mark Stoner  
**RE:** Product Terminations

To all concerned parties,

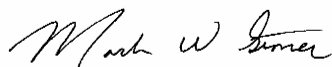
This bulletin is to notify all customers of the termination of the following Ecliptek series effective January 11<sup>th</sup>, 2006:

<b>Series</b>	<b>Description</b>	<b>Recommended Replacement</b>
E7WS	SMD Watch Crystal	E1WS, E5WS, E6WS

Because of the circumstances surrounding this termination, there will be no end-of-life policy exercised. The series will be terminated with no purchasing or lifetime buy window available.

All of us at Ecliptek Corporation apologize for any inconvenience this may have caused and can assure you we are taking measures to insure this will not happen again in the future. If there are any questions pertaining to this bulletin, please feel free to contact me. Thank you for your cooperation.

Best Regards,

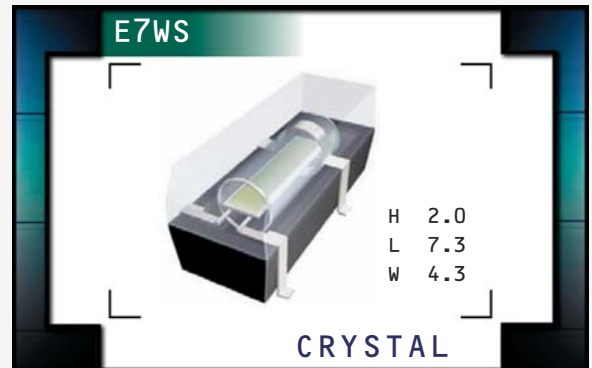


Mark W. Stoner  
Director of Marketing  
Ecliptek Corporation

# E7WS Series



- RoHS Compliant
- 32.768kHz watch crystal
- Miniature four pad surface mount package
- $\pm 20$ ppm frequency tolerance
- 12.5pF load capacitance
- Tape and reel available



## NOTES

OBSOLETE

### ELECTRICAL SPECIFICATIONS

Frequency	32.768kHz
Frequency Tolerance (at 25°C)	$\pm 20$ ppm
Frequency Stability	-0.035ppm / $(\Delta^\circ\text{C})^2$ Maximum, Parabolic; Turn Over Temperature at 25°C $\pm 5^\circ\text{C}$
Operating Temperature Range	-40°C to 85°C
Aging (at 25°C)	$\pm 3$ ppm / year Maximum
Storage Temperature Range	-55°C to 125°C
Shunt Capacitance	0.9pF Typical, 2pF Maximum
Motional Capacitance	2.3fF Typical
Equivalent Series Resistance	55,000 Ohms Maximum
Insulation Resistance	500 Megaohms Minimum at 100V <sub>DC</sub>
Drive Level	1 $\mu$ Watt Maximum
Load Capacitance (C <sub>L</sub> )	12.5pF

MANUFACTURER  
ECLIPTEK CORP.

CATEGORY  
CRYSTAL

SERIES  
E7WS

PACKAGE  
PLASTIC

CLASS  
CR55

REV. DATE  
11/05

# PART NUMBERING GUIDE

## E7WSDC 12 - 32.768K TR

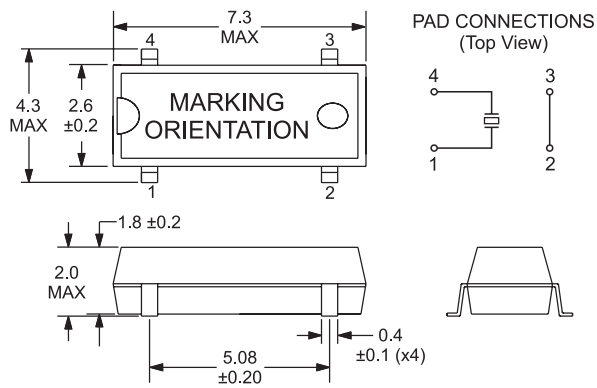
LOAD CAPACITANCE  
12=12.5pF

PACKAGE OPTIONS  
Blank=Bulk, TR=Tape and Reel

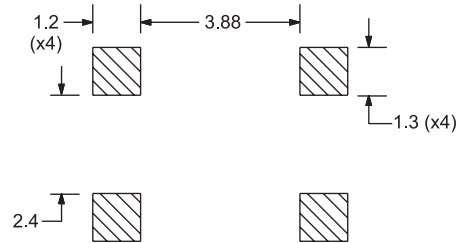
### NOTES

OBSOLETE

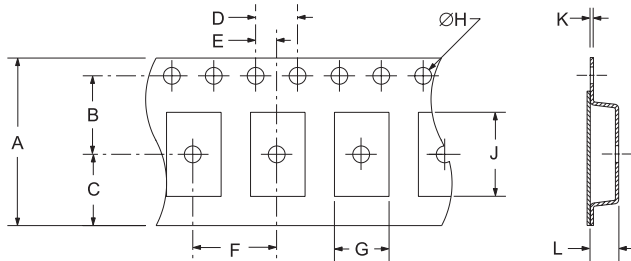
#### MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



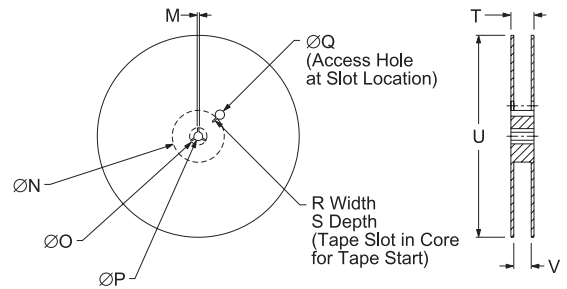
#### SUGGESTED SOLDER PAD LAYOUTS ALL DIMENSIONS IN MILLIMETERS



#### TAPE AND REEL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS

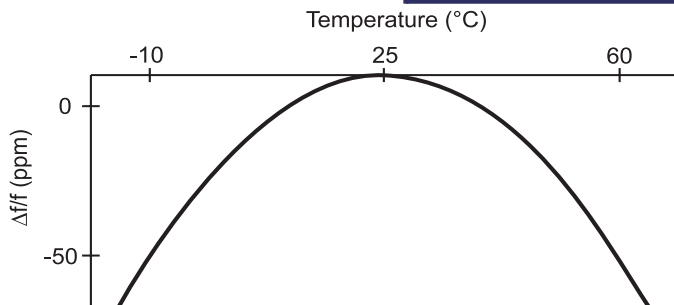


TAPE	A	B	C	D	E	
	16±.3	7.5±.1	6.75±.1	4±.2	2±.1	
	F	G	H	J	K	L
	8±.2	4.35±.1	1.5±.1	10.7±.2	.5±.05	3.7±.2



REEL	M	N	O	P	Q	
	1.5 MIN	50 MIN	20.2 MIN	13±.2	40 MIN	
	R	S	T	U	V	QTY/REEL
	2.5 MIN	10 MIN	22.4 MAX	360 MAX	16.4±2-0	3,000

#### PARABOLIC TEMPERATURE CURVE



#### MARKING SPECIFICATIONS

Line 1: CS XXXXX  
 Lot Identifier (5 Characters MAX)  
 Frequency Code

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