ECLIPTEK® CORPORATION

Marketing Bulletin

DATE: July 28th, 2006

TO: All Sales Personnel

FROM: Mark Stoner

RE: Product Termination

To all concerned parties,

This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective July 28th, 2006:

Series	Description	Recommended Replacement
ECPSM29T	SMD Watch Crystal	E1WS

In compliance with our End of Life (EOL) policy, this will serve as advanced notice of product termination. New orders will not be accepted after April 30th, 2007, with delivery to conclude by July 31st 2007.

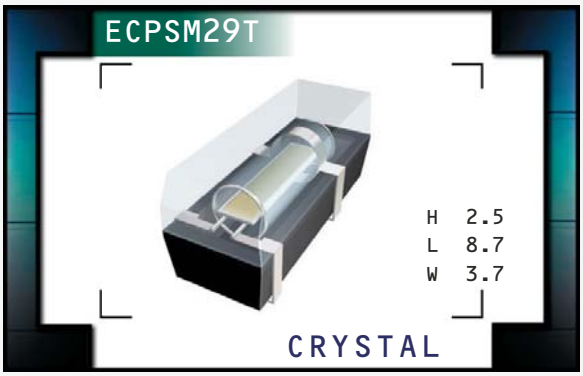
If there are any questions pertaining to this bulletin, please fell free to contact me. Thank you again for your cooperation.

Best Regards,

Mark W. Stoner
Vice President of Marketing
Ecliptek Corporation

ECPSM29T Series

- 32.768kHz watch crystal
- Miniature four pad surface mount package
- ±20ppm frequency tolerance
- 12.5pF load capacitance
- Tape and reel available



NOTES

OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency	32.768kHz
Frequency Tolerance (at 25°C)	±20ppm
Frequency Stability	-0.042ppm / $(\Delta°C)^2$ Maximum, Parabolic; Turn Over Temperature at 25°C ±5°C
Operating Temperature Range	-10°C to 60°C
Aging (at 25°C)	±3ppm / year Maximum
Storage Temperature Range	-40°C to 85°C
Shunt Capacitance	0.85pF Typical, 2pF Maximum
Motional Capacitance	2.0fF Typical
Equivalent Series Resistance	60,000 Ohms Maximum
Insulation Resistance	500 Megaohms Minimum at $100V_{DC}$
Drive Level	1 µWatt Maximum
Load Capacitance (C_L)	12.5pF

MANUFACTURER	CATEGORY	SERIES	PACKAGE	CLASS	REV. DATE
ECLIPTEK CORP.	CRYSTAL	ECPSM29T	PLASTIC	CR14	05/05

PART NUMBERING GUIDE

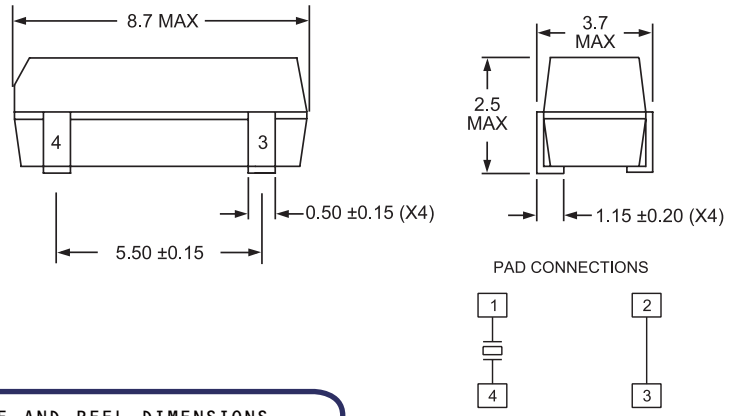
ECPSM29T - 32.768K TR

PACKAGE OPTIONS
Blank=Bulk, TR=Tape and Reel

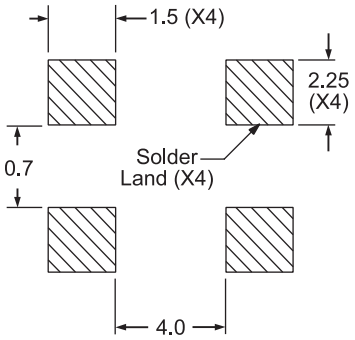
NOTES

OBSOLETE

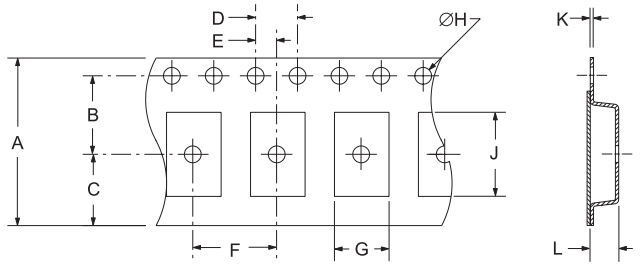
MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



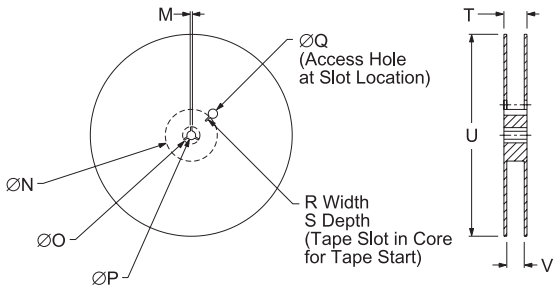
SUGGESTED SOLDER PAD LAYOUTS
ALL DIMENSIONS IN MILLIMETERS



TAPE AND REEL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS

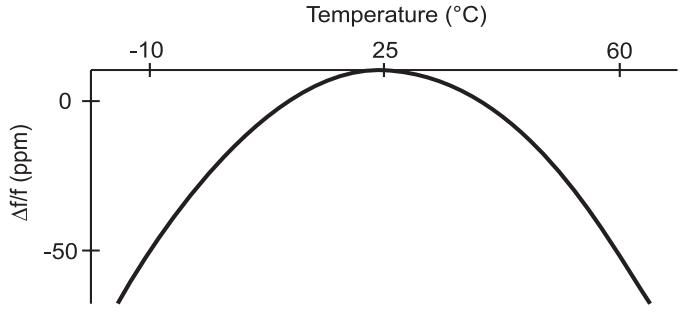


TAPE	A	B	C	D	E
	16±.3	7.5±.1	6.75±.1	4±.2	2±.1
F	G	H	J	K	L
8±.2	4.35±.1	1.5 +.2-.1	10.7±.2	.5±.05	3.7±.2



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: 32K XXXX
- Lot Identifier (4 or 5 Characters)
- Frequency Code
  32K or C2K

MANUFACTURER	CATEGORY	SERIES	PACKAGE	CLASS	REV. DATE
ECLIPTEK CORP.	CRYSTAL	ECPSM29T	PLASTIC	CR14	05/05