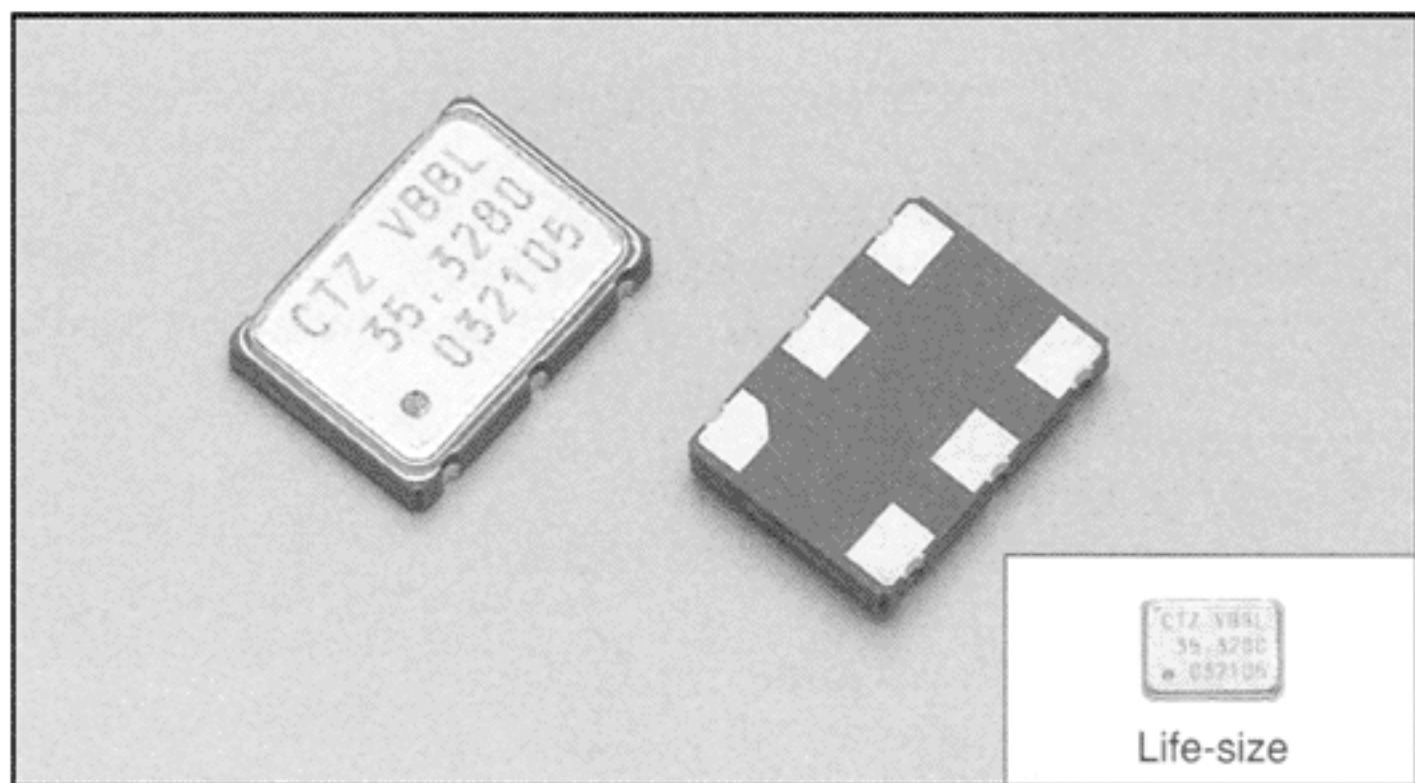
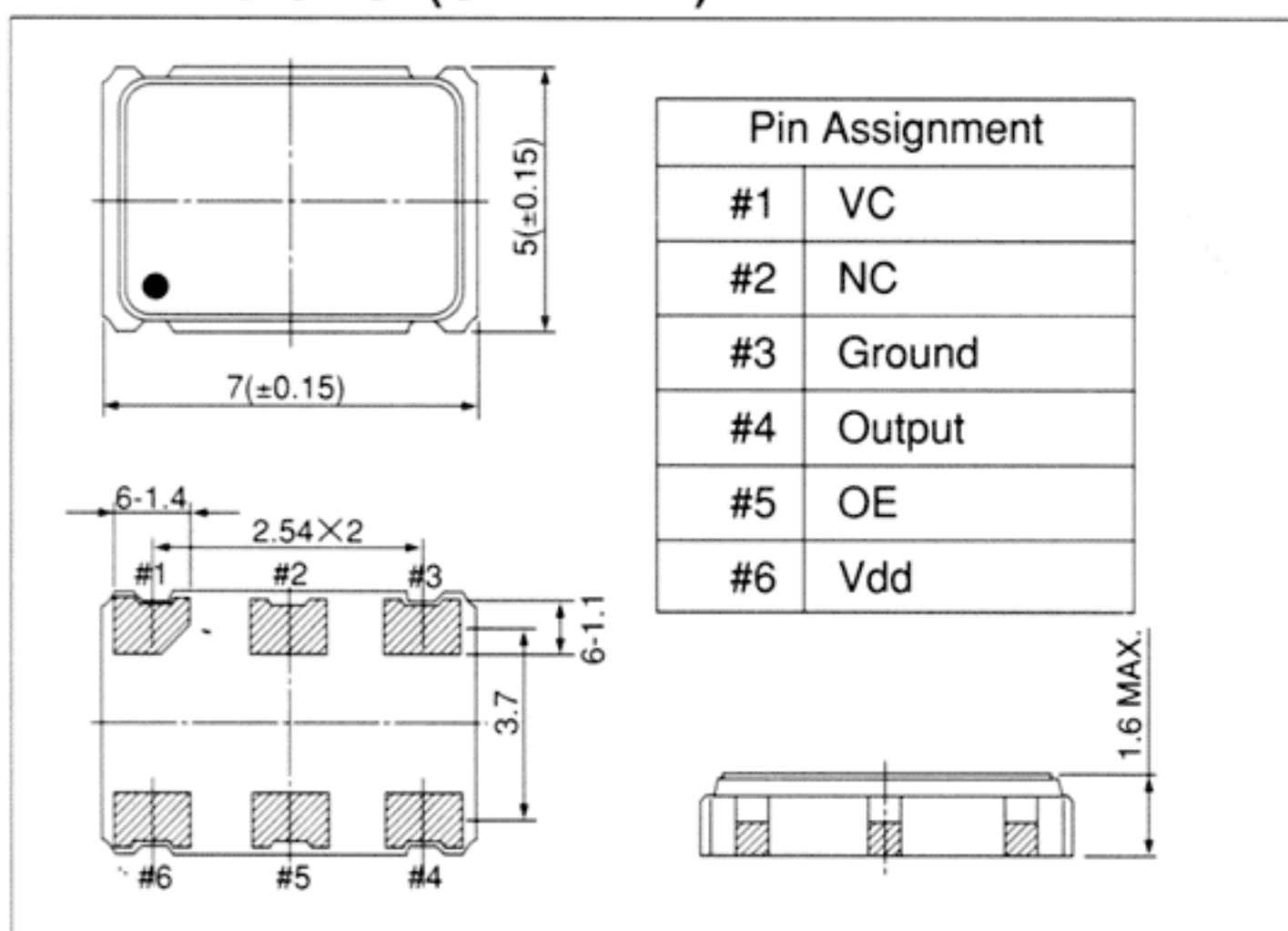


VOLTAGE CONTROLLED CRYSTAL OSCILLATOR (CERAMIC SURFACE MOUNT TYPE) CITIZEN[®]

CSX-750V SERIES (2,000pcs/reel)



■ DIMENSIONS: (UNIT=mm)



■ FEATURES:

- Small and Ceramic SMD type.
- High Stability.
- Emboss Taping enabling Automatic Assembly.
- Low Power Consumption.
- Wide Pull Range.
- Tristate Output.

■ APPLICATIONS:

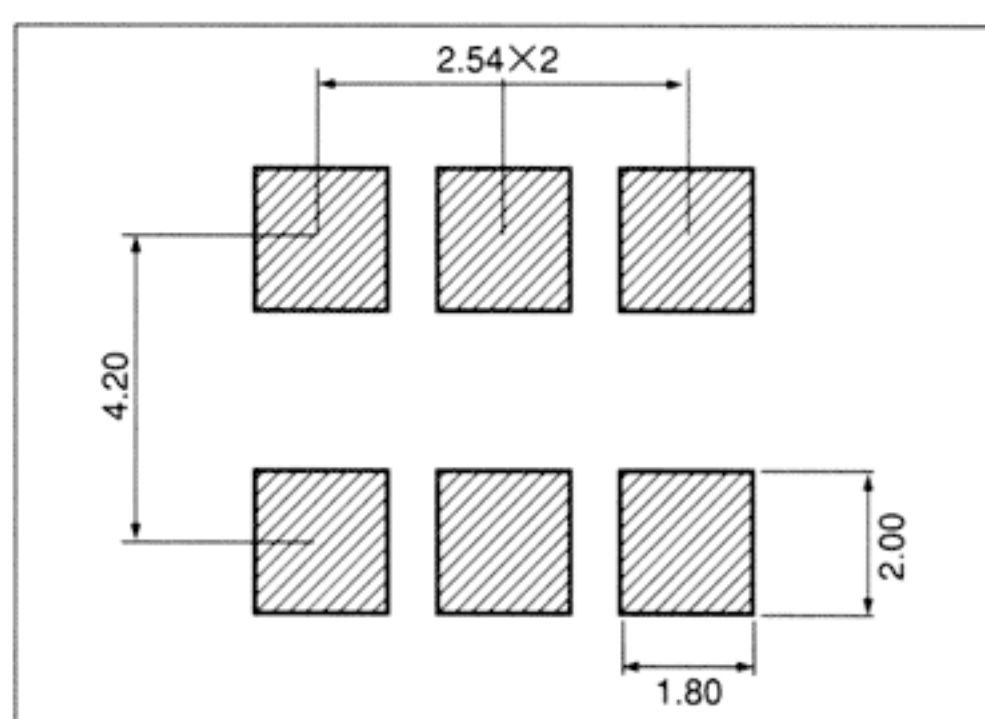
- Set-top boxes • Digital TVs • xDSL modems • DVD players • Digital Videos

■ DESCRIPTION:

- CSX-750V series are Voltage Controlled Crystal Oscillators, with CMOS logic output. The device is very small size, leadless ceramic SMD package with 6 contact pads.

CSX-750V series is ideal for today's surface mounting assembly environments.

■ RECOMMENDED SOLDERING PATTERN: (UNIT=mm)



■ STANDARD SPECIFICATIONS

Item	Model	CSX-750VC(**)	CSX-750VB(**)
Frequency range		2.000MHz ~ 40.000MHz	
Operating temperature range		VCBM : -10 to +70°C VCEM : -40 to +85°C	VBBL : -10 to +70°C VBEL : -40 to +85°C
Supply voltage		5.0V±10%	3.3V±5%
Supply current		30mA MAX. / no load	11mA MAX. / no load
Frequency stability *1		±50ppm MAX.	
Pullability		±100ppm MIN. / Vc=2.5±2.0V	±90ppm MIN. / Vc=1.65±1.65V
Linearity		10% MAX.	
Output load		30pF or 2TTL MAX.	30pF MAX.
Duty	TTL level (1.4V) CMOS level (V _{DD} /2)	45-55% 45-55%	— 45-55%
Output levels		VL:0.4V MAX. VH:V _{DD} -0.4V MIN.	
Rise & Fall time (tr, tf)		5nsec MAX. (20-80%V _{DD})	
Start up time *2		4msec MAX.	
Modulation band width		10KHz MIN. / Gain-3dB	
Phase noise		-120dBc/Hz MAX. / Offset 1KHz	
Shock resistance		±10ppm MAX. Drop test of 3 times on a hard board from 75cm height or shock test of 3000G x 0.3ms x 1/2 sin wave x 3 directions	

*1. Inclusive of 25°C tolerance, operating temperature, input voltage change, load change, reflow, and 1st year aging.

*2. Vc must be kept ground level or left open when starting up.