

CRYSTAL CLOCK OSCILLATORS (SMD • Ceramic Package)

RoHS compliant / Pb free

CSX-252F SERIES

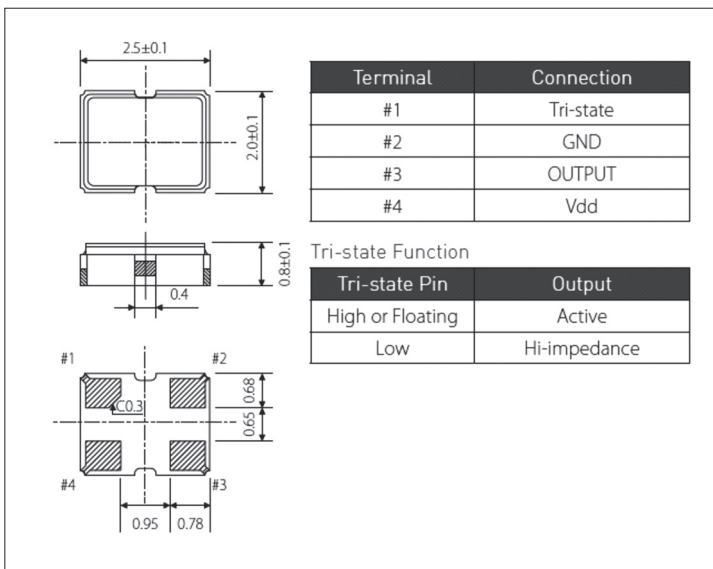
3,000pcs/reel



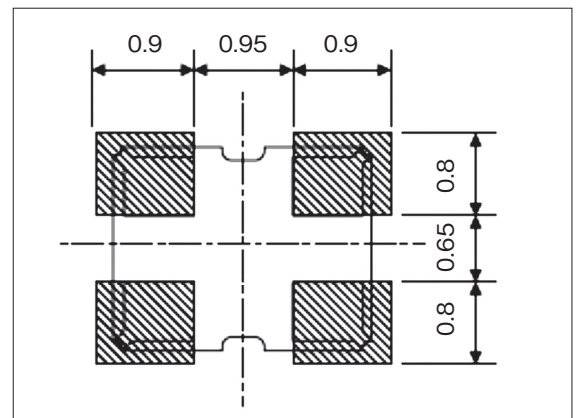
FEATURES

- Reflowable and high density mounting type small SMD package.
- Complete lead(Pb)-free product.
- Available for lead(Pb)-free soldering.
- Suitable for various applications such as PC, Communication equipment, AV equipment, OA equipment, Measuring instruments, etc.

DIMENSION [mm]



SOLDER PAD LAYOUT [mm]



STANDARD SPECIFICATIONS

Item	Model	OE	CSX-252FM (*)	CSX-252FH (*)	CSX-252FJ (*)	CSX-252FA (*)
		STAND-BY				
Frequency Range			32.768kHz, 2.000MHz ~ 60.000MHz			
Supply Voltage			1.8V ±5%	2.5V ±5%	3.3V ±0.3V	1.8V ~3.3V
Frequency Stability		(*)	B: ±50ppm(-20°C~+70°C), E: ±50ppm(-40°C~+85°C)			
Operating Temperature Range			-20°C~+70°C / (-40°C~+85°C)			
Storage Temperature Range			-45°C~+90°C			
Current consumption		TTL level (1.4V)	2.5mA max: ~30MHz	4.5mA max: ~19MHz	6mA max: ~19MHz	
		CMOS level (1/2 Vdd)	3.0mA max: ~40MHz	5.5mA max: ~40MHz	7mA max: ~40MHz	
			3.5mA max: ~60MHz	6.5mA max: ~60MHz	8mA max: ~60MHz	
Duty		TTL level (1.4V)	-			
		CMOS level (1/2 Vdd)	45% ~ 55%			
Output Voltage		V _{OH}	0.9V _{dd} Min.			
		V _{OL}	0.1V _{dd} Max.			
Output Load		TTL	-			
		CMOS	15pF Max.			
Rise and Fall Time CMOS (20%V _{dd} ⇔ 80%V _{dd})			10nsec Max.			
Start-up time			10msec Max.			
			(Time at minimum operating voltage to be 0sec.)			
Input Voltage (ST)		V _{IH}	0.7V _{dd} Min.			
		V _{IL}	0.2V _{dd} Max.			
Disable current			-			
Stand-by current			50 μA Max.			