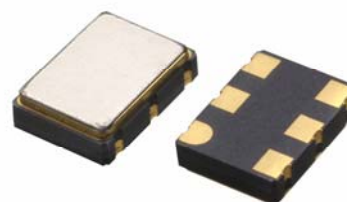


## Applications

- WLAN access point
- ADSL router, terminal adapter
- STB (terrestrial, cable, satellite)
- Mobile device
- Digital audio device
- LAN / WAN terminal
- Various EMI (electromagnetic interference) reduction applications

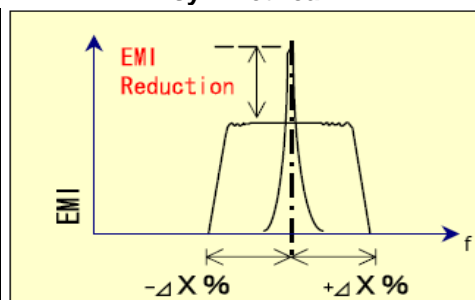
Parameter	Specification
Frequency range	8 ~ 170 MHz
Frequency stability	±50 ppm ~ ±100 ppm
Supply voltage	3.3 V ±5 %
Output signal	CMOS
Spread rate	±0.25 ~ ±2.00 %
Output voltage	$V_{OL} \leq 0.1 \text{ Vdc}$ $V_{OH} \geq 0.9 \text{ Vdc}$
Output load	15 pF
Tri-State function	high or open → pin #4 (E) enable
Operating temperature range	-10 to +70 °C or -40 to +85 °C



## Center Spread Type

Spread rate	Model
±0.25 %	MCO-1S3SC025
±0.50 %	MCO-1S3SC050
±0.75 %	MCO-1S3SC075
±1.00 %	MCO-1S3SC100
±1.50 %	MCO-1S3SC150
±2.00 %	MCO-1S3SC200

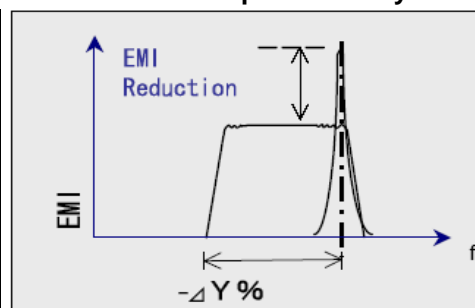
symmetrical



## Down Spread Type

Spread rate	Model
-0.50 %	MCO-1S3SD050
-1.00 %	MCO-1S3SD100
-1.50 %	MCO-1S3SD150
-2.00 %	MCO-1S3SD200
-3.00 %	MCO-1S3SD300
-4.00 %	MCO-1S3SD400

down side spectrum only



2002/95/EC RoHS compliant

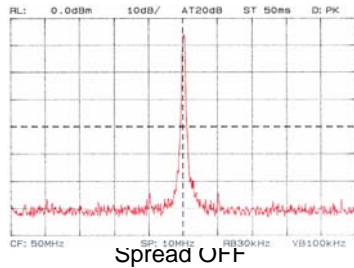
31 Mar. 10

# MCO-1S3S

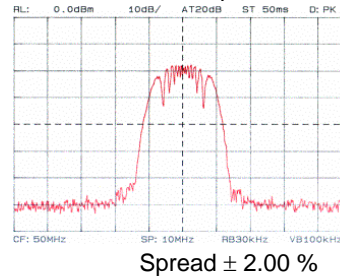
Low EMI Spread Spectrum Oscillator



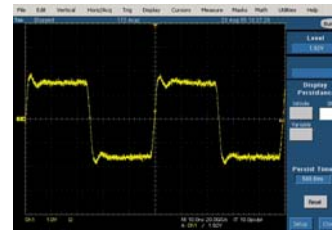
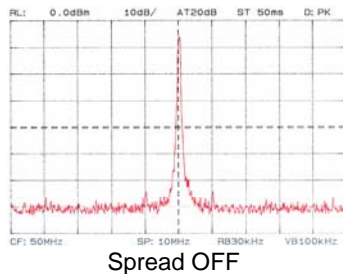
## MCO-1S3SC Center Spread Spectrum



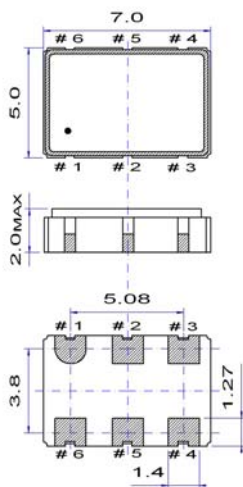
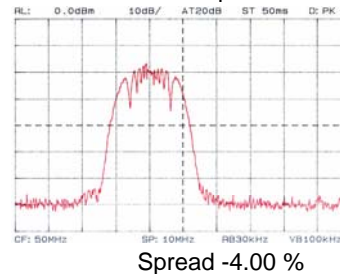
Clock Form Spread  $\pm 2.00\%$



## MCO-1S3SD Down Spread Spectrum



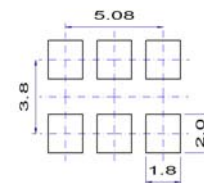
Clock Form Spread  $-4.00\%$



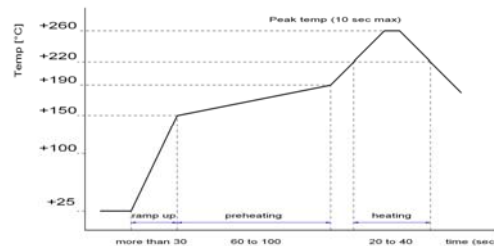
Pin function

- # 1 E/D
- # 2 Spread on/off
- # 3 GND
- # 4 Output
- # 5 NC
- # 6 Vdc

Example for soldering pattern



Example for IR reflow soldering temperature



2002/95/EC RoHS compliant