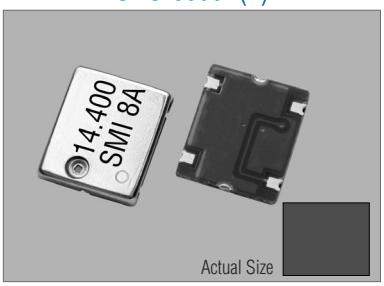
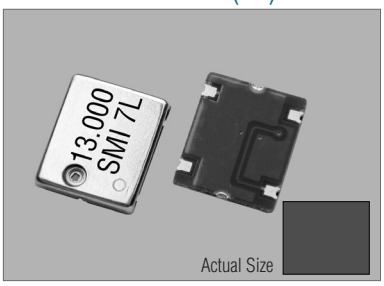
Temperature Compensated Crystal Oscillators

SXO-6000K SERIES (4 Terminals with Trimmer) STANDARD SMD TCXO

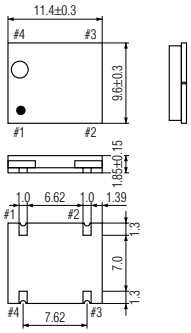
SXO-6000K(T)



SXO-6000K(TV)

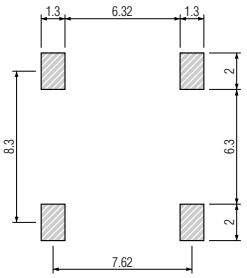


SXO-6000K



PIN	CONNECTION	
	SXO-6000KT	SXO-6000KTV
1	N.C.	Vcon
2	GND	GND
3	OUTPUT	OUTPUT
4	+V DC	+V DC

SOLDERING PATTERN



STANDARD SPECIFICATIONS

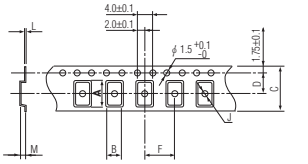
Item	Specifications	
Generic part number	SXO-6000K(T)	SXO-6000K(TV)
Frequency range	9.600000 MHz to 40.000000 MHz	
Initial frequency tolerance	±0.5 ppm max. (Vcon = 1/2VDD DC at +25˚C ±2˚C)	
Frequency stability Temperature range	 BB/i/ii : ±1.0 ppm over −20˚C to +70˚C (referred to +25˚C) EE/k/jj : ±2.5 ppm over −30˚C to +75˚C (referred to +25˚C) EE/m/ll : ±2.5 ppm over −40˚C to +85˚C (referred to +25˚C)	
Input voltage change	±0.3※ ppm max. at VDD ±5% DC	
Output load change	±0.3※ ppm max. at 10K Ω ±10% with 10 pF ±10%	
Aging	±1.0※ ppm max. / year at +25˚C ±3˚C	
Absolute Max. Ratings Supply voltage	 0V to +7.0V	
Control voltage (Vcon)	n.a.	0.3V to VDD +0.6V
Storage temperature	−40˚C to +85˚C	
Operating Conditions Operating temperature	 i/ii : −20˚C to +70˚C k/jj : −30˚C to +75˚C m/ll : −40˚C to +85˚C	
Input voltage (VDD)	J = +3.0V, K = +3.3V, N = +5V DC ±5%	
Control voltage (Vcon)	n.a	1/2VDD ±1V DC (VDD = +3.0V or +3.3V) 1/2VDD ±2V DC (VDD = +5V)
Input current	1.5※ mA max. (9.6 MHz to 16 MHz) 2.0 mA max. (16 MHz to 40 MHz)	
Output Level	 0.8Vp※-p min. (9.6 MHz to 16 MHz) 0.7Vp-p min. (16 MHz to 40 MHz)	
Load	10k Ω // 10 pF	
Waveform	Clipped sine wave (DC-cut)	
Frequency Adjustment Voltage control	 n.a.	±5※ ppm to ±10※ ppm (Vcon = 1/2VDD ±1V or ±2V)
Frequency slope	n.a.	Positive
Internal trimmer	±3 ppm min.	
SSB phase noise	−140 dBc/Hz at 1 kHz offset	
Startup time	10 ms max.	
IR reflow resistance	±1.0 ppm max.	
Reflow condition	+250˚C ±10˚C for 10 seconds	
Standard frequencies (MHz)	10.000000 12.800000 13.000000 14.400000 15.360000 16.000000 19.200000 20.000000	

(※) Please contact about specifications for higher frequencies than 22MHz and input voltages of +3.3V & +5V.

PACKAGE DATA

Item / Package	SXO-6000K(T)	SXO-6000K(TV)
Cover	Metal	Metal
Base	PCB	PCB
Terminal	NiAu	NiAu
Terminal plating	Gold	Gold
RoHS	Compliant (Pb-free)	Compliant (Pb-free)

TAPE SPECIFICATIONS



A	B	C	D	F	J	L	M	Reel Dia.	Qty/Reel
12.0	10.2	24.0	11.5	12.0	2.0	0.3	2.3	330 (300)	2000pcs

TCXO