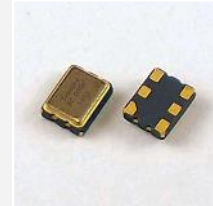


MINIATURE CERAMIC SMD OSCILLATOR (3.2 x 2.5 x 1.1mm)
FEATURES

- Available with output frequency from 10M~1.5GHz
- High reliability and low aging
- Available CMOS, LVDS, and LVPECL outputs
- 3.3V and 2.5V supply options

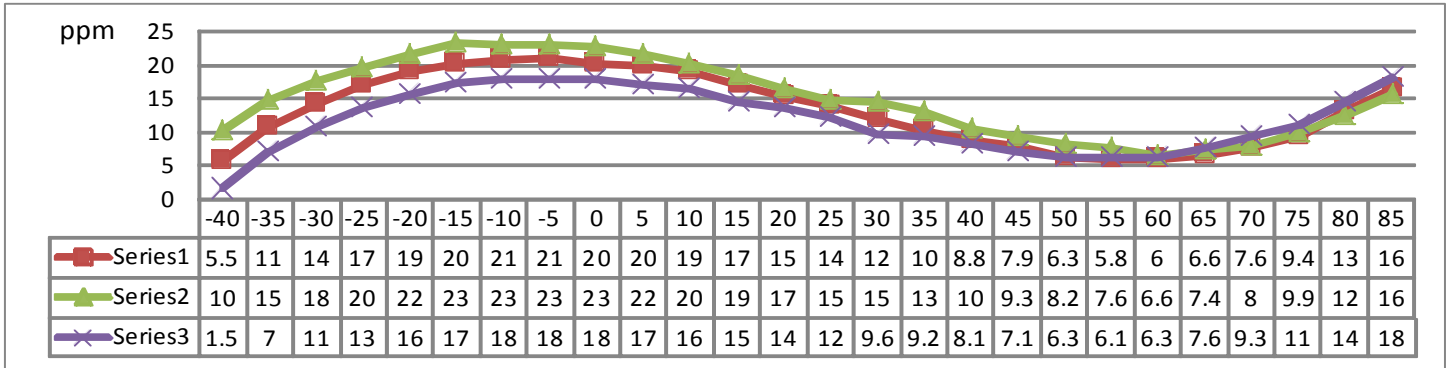

■ SPECIFICATION

PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE
FREQUENCY RANGE	CMOS	10		250	MHz	
	LVDS	10		1500	MHz	
	LVPECL	10		1500	MHz	
FREQUENCY STABILITY		±10*	±50	±100	ppm	
OPERATING TEMPERATURE RANGE		-40		85	°C	* See P/N guide for other options
STORAGE TEMPERATURE RANGE		-55		125	°C	
SUPPLY VOLTAGE ±10%	V _{DD} = 2.5V _{DC}	2.375	2.500	2.625	V	* See P/N guide for other options
	V _{DD} = 3.3V _{DC}	2.970	3.300	3.630	V	
SUPPLY CURRENT	CMOS		20	45	mA	(V _{DD} = 2.5V _{DC} , 3.3V _{DC})
	LVDS		23	45	mA	
	LVPECL		54	60	mA	
OUTPUT	LOAD	CMOS		15	pF	
		LVDS		100	Ω	Output - Complimentary Output
		LVPECL		50	Ω	into V _{DD} - 2V _{DC}
	LEVEL	CMOS (V _{OH})	0.9 x V _{DD}		V	
		CMOS (V _{OL})		0.1 x V _{DD}	V	
		LVDS (V _{OH})		1.4	V	
		LVDS (V _{OL})	0.9	1.1	V	
		LVPECL (V _{OH})	V _{DD} - 1.03V	V _{DD} - 0.60V	V	
		LVPECL (V _{OL})	V _{DD} - 1.85V	V _{DD} - 1.60V	V	
	SYMMETRY (DUTY CYCLE)	CMOS	45	55	%	
		LVDS	45	55	%	
		LVPECL	45	55	%	
	RISE AND FALL TIME (Tr/Tf)	CMOS		1.0	nS	
		LVDS		0.25	nS	
		LVPECL		0.25	nS	
	START-UP TIME			2.0	3.0	mS
STAND-BY VOLTAGE	ENABLE (V _{IH})	0.7 x V _{DD}			V	
	DISABLE (V _{IL})			0.3 x V _{DD}	V	
ENABLE DELAY TIME				100	nS	
DISABLE DELAY TIME				100	nS	
AGING	per 1year			±3.0	ppm	@ 25°C ±3°C
	per 10years			±5.0	ppm	
PHASE JITTER RMS			0.60	1.50	pS	@ 12kHz ~ 20MHz

* Available in selected operating temperature range

Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.

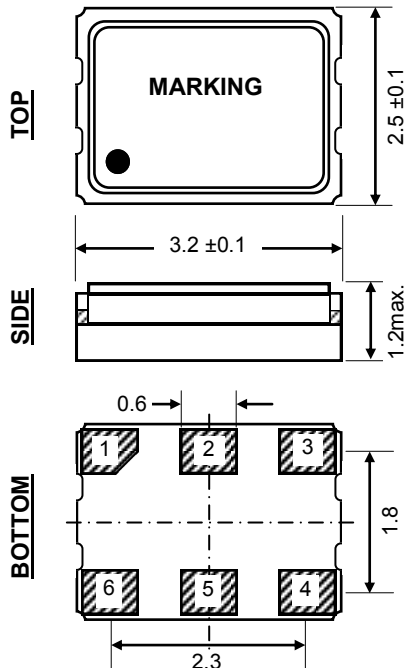
■ 27MHz 3.3V Temperature Test Data (-40°C ~ 85°C)



■ Typical Phase Noise

Frequency	1kHz	10kHz	100kHz	1MHz
156.25MHz	-114.70 dBc/Hz	-124.11 dBc/Hz	-126.23 dBc/Hz	-140.45 dBc/Hz
212.5MHz	-108.73 dBc/Hz	-115.58 dBc/Hz	-116.22 dBc/Hz	-136.02 dBc/Hz
622.08MHz	-100.38 dBc/Hz	-106.69 dBc/Hz	-106.43 dBc/Hz	-126.36 dBc/Hz

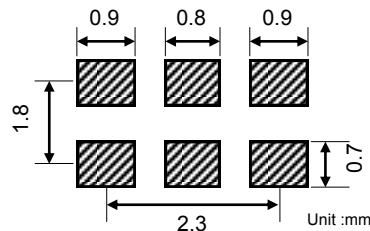
■ PACKAGE DIMENSIONS



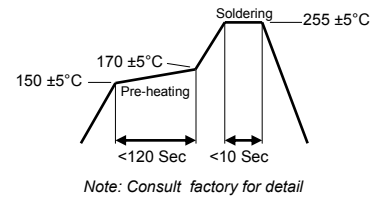
Pin Configuration	
1	En/Dis or NC
2	En/Dis or NC
3	GND
4	Output
5	**C.output
6	V _{DD}

** LVDS/LVPECL only
NC for CMOS

■ SOLDER PATTERN



■ REFLOW PROFILE



■ PART NUMBERING GUIDE

