

ULTRA MINIATURE SPREAD SPECTRUM SMD OSCILLATOR (5.0 x 3.2 x 1.3mm)

FEATURES:

- LOW EMI / EMC
- CMOS OUTPUT
- LOW VOLTAGE

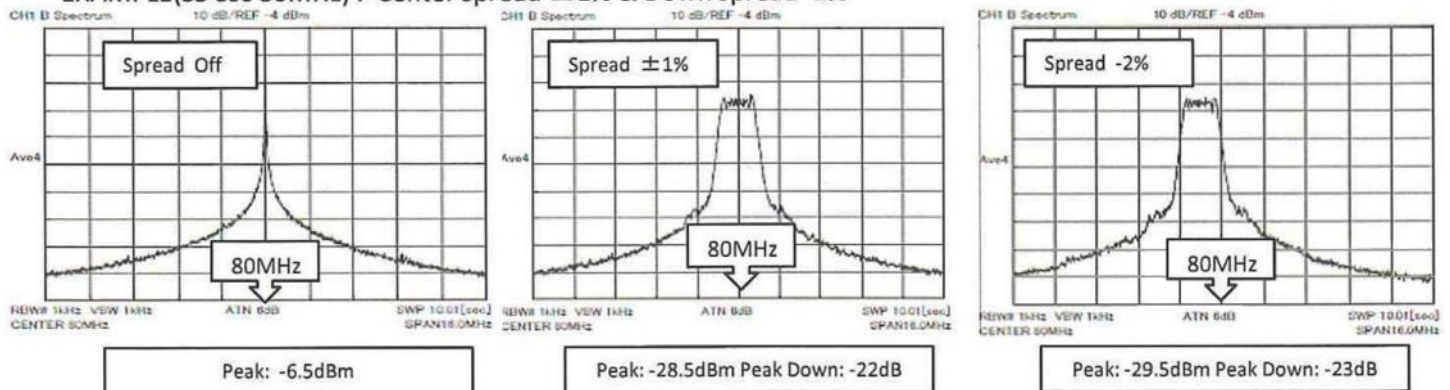


■ SPECIFICATION

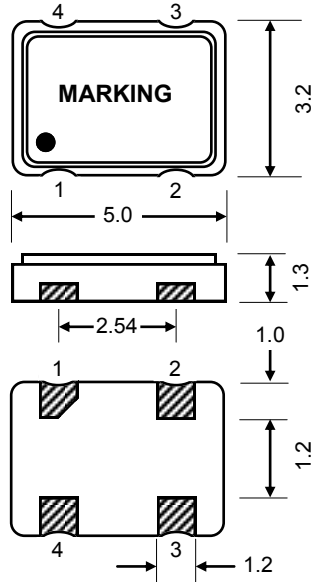
PARAMETER		MIN.	TYP.	MAX.	UNIT	NOTE
FREQUENCY RANGE		1.0000		166.0000	MHz	(V _{DD} = +2.5V)
		1.0000		200.000	MHz	(V _{DD} = +3.3V)
FREQUENCY STABILITY		±25		±100	ppm	
OPERATING TEMPERATURE RANGE		-45		85	°C	See P/N guide for other options
STORAGE TEMPERATURE RANGE		-55		125	°C	
SUPPLY VOLTAGE ± 10%		2.5		3.3	V _{DC}	
SUPPLY CURRENT	1MHz ≤ f < 50MHz			20	mA	
	50MHz ≤ f < 100MHz			30	mA	
	100MHz ≤ f < 150MHz			35	mA	
	150MHz ≤ f ≤ 200MHz			40	mA	
OUTPUT	LOGIC FAMILY	CMOS				
	LOAD			15	pF	
	LEVEL LOGIC '1' (V _{OH})	0.9 x V _{DD}			V	
	LEVEL LOGIC '0' (V _{OL})			0.1 x V _{DD}	V	
	SYMMETRY(DUTY CYCLE)	40	50	60	%	@ 1/2 V _{DD} level
	RISE AND FALL TIME (Tr/Tf)			10	nS	
	START-UP TIME			10	mS	
STAND-BY VOLTAGE	ENABLE (V _{IH})	0.7 x V _{DD}			V	
	DISABLE (V _{IL})			0.3 x V _{DD}	V	
STAND-BY CURRENT (Pin#1-V _{IL})				10	µA	
ENABLE DELAY TIME				10	nS	
DISABLE DELAY TIME				10	nS	
AGING			±3	±5	ppm/year	@ +25°C ±3°C
PHASE JITTER RMS				100	pS	@ 12kHz ~ 20MHz
MODULATION RATIO	Center spread: ±0.125% ~ ±2% (0.125 step) Down spread: -0.25% ~ -0.4% (0.25 step)					

■ MODULATION RATIO

EXAMPLE(SS osc 80MHz) : Center spread ±1% & Down spread -2%

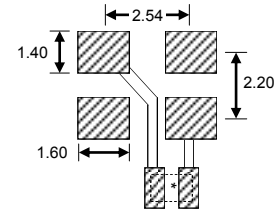


Transko Electronics, Inc reserves the right to make changes to the product (s), service (s), and specification (s) described herein without notice. See "Terms of Sale" for details on our website.

■ PACKAGE DIMENSIONS


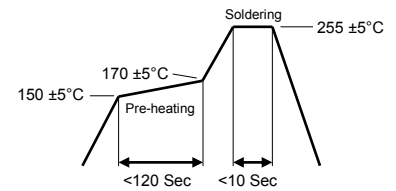
Unit:mm

Pin Configuration	
1	N.C. or En/Dis
2	GND
3	Output
4	V _{DD}

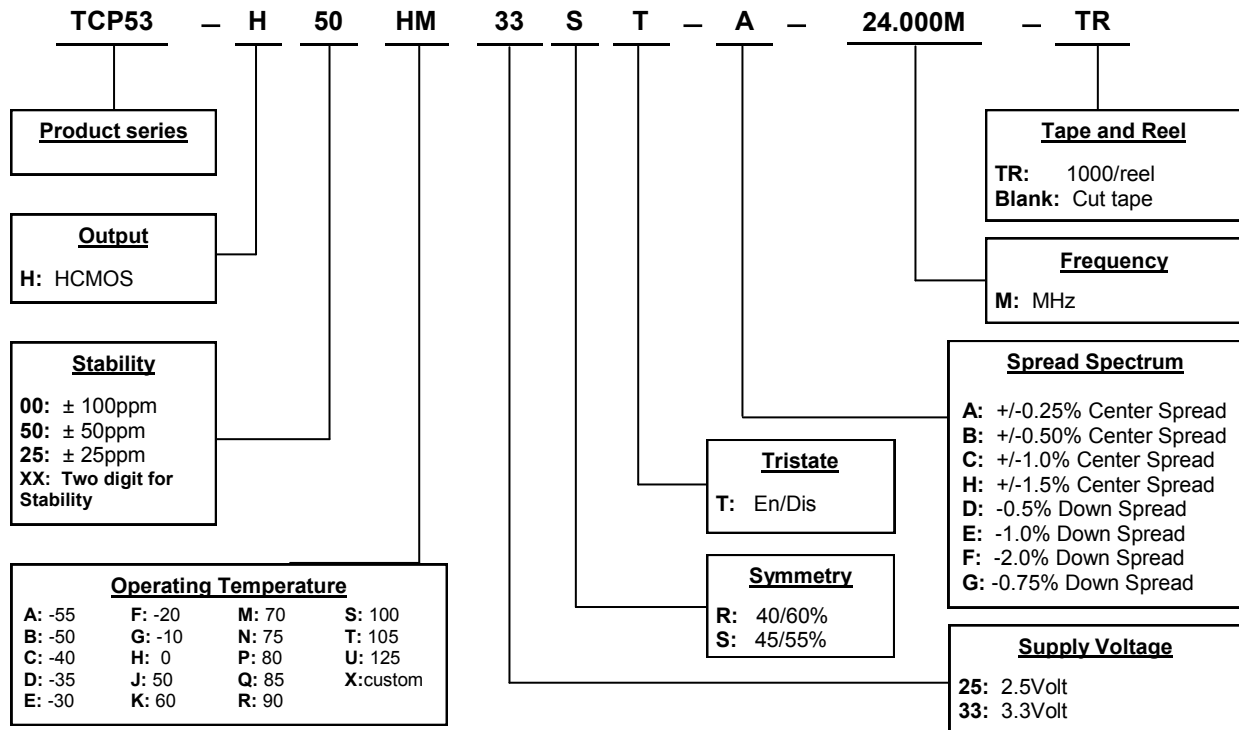
■ SOLDER PATTERN


Unit :mm

*0.01μF to 0.1μF bypass capacitor recommended

■ REFLOW PROFILE


Note: Consult factory for detail

■ PART NUMBERING GUIDE


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.