

FEATURES

- HCMOS logic compatible
- Wide frequency range
- Low power consumption
- Resistance weld package
- 3.3V operation (optional)

CLOCK OSCILLATOR

The HSC Series clock oscillator offers low current drain and is compatible with HCMOS logic. It is ideal for low power HCMOS applications. The metal package with pin #7 case ground acts as shielding to minimize radiation and conforms to FCC EMI specifications.

PART NUMBERING GUIDE "EXAMPLE"

PART NUMBER *	FREQUENCY STABILITY
HSC2	±100 PPM
HSC1	±50 PPM
HSC0	±25 PPM

* Complete part number to include frequency. i.e. HSC2-10.000MHz

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	FREQUENCY RANGE	CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
FREQUENCY RANGE (f_0)	1.000 ~ 150.000		1.000		150.000	MHz
OPERATING TEMP. RANGE (T_{OPR})	1.000 ~ 150.000		0		+70	°C
STORAGE TEMP. RANGE (T_{STG})	1.000 ~ 150.000		-55		+125	°C
FREQUENCY STABILITY	1.000 ~ 150.000	All conditions*	-100		+100	PPM
INPUT CURRENT (I_{DD})	1.000 ~ 20.000				12	mA
	20.000 ~ 25.000				15	mA
	25.000 ~ 150.000				30	mA
OUTPUT SYMMETRY		50% V_{DD} level	40	50 ±3	60	%
RISE TIME (T_R)	1.000 ~ 25.000	10% ~ 90% V_{DD} level			10	nS
	25.000 ~ 150.000	10% ~ 90% V_{DD} level			5	nS
FALL TIME (T_F)	1.000 ~ 25.000	90% ~ 10% V_{DD} level			10	nS
	25.000 ~ 150.000	90% ~ 10% V_{DD} level			5	nS
OUTPUT VOLTAGE (V_{OL}) (V_{OH})	1.000 ~ 150.000	$I_{OL} = 4$ mA			0.5	V
	1.000 ~ 150.000	$I_{OH} = -4$ mA	4.5			V
OUTPUT CURRENT (I_{OL}) (I_{OH})	1.000 ~ 150.000	$V_{OL} = 0.5$ V			4	mA
	1.000 ~ 150.000	$V_{OH} = 4.5$ V			-4	mA
OUTPUT LOAD	1.000 ~ 150.000	HCMOS			15	pF
START-UP TIME (T_S)	1.000 ~ 25.000				5	mS
	25.000 ~ 150.000				10	mS
SUPPLY VOLTAGE	1.000 ~ 150.000	+5.0 ±0.25				V _{DC}

* Inclusive of 25°C tolerance, operating temperature range, input voltage change, load change, aging, shock and vibration.

PACKAGE DIMENSIONS (mm)

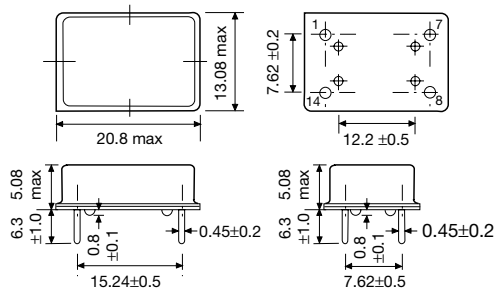


Figure 1) HSC Series – Top, Bottom and Side views

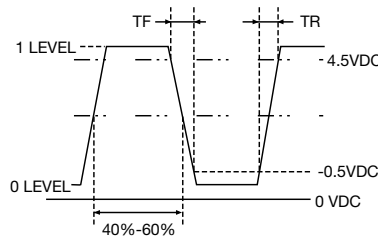


Figure 2) Output Wave Form

PIN CONNECTIONS

#1	NC
#7	CASE GND
#8	OUTPUT
#14	+5 V DC

Figure 3) Pin Connection