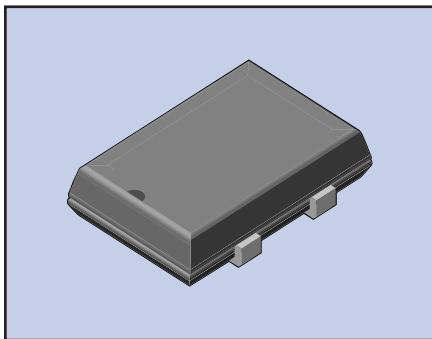




The ECS-8FMX (5V) and ECS-8FA3X (3.3V) are CMOS compatible, J-leaded SMD oscillators. The 8F Series utilizes a low power CMOS IC in a cost effective package suitable for reflow soldering.

FEATURES

- 5.0V & 3.3V versions
- Extended temperature range
- RoHS Compliant
- Tape and Reel (1,000 pcs STD)

PART NUMBERING GUIDE

	FREQUENCY (50.0 MHz)		TAPE AND REEL	
ECS-8FMX	-	500	-	TR

Sample Part Number: ECS-8FMX-500-TR

OPERATING CONDITIONS/ELECTRICAL CHARACTERISTICS

PARAMETERS	CONDITIONS	ECS-8FMX (5V)			ECS-8FA3X (3.3V)			UNITS
		MIN	TYP	MAX	MIN	TYP	MAX	
FREQUENCY RANGE		1.000		80.000	1.000		80.000	MHz
TEMPERATURE RANGE	Operating	-40°		+85°	-40°		+85°	°C
	Storage	-55°		+125°	-55°		+125°	°C
SUPPLY VOLTAGE		+4.5	+5.0	+5.5	+3.0	+3.3	+3.6	V DC
FREQUENCY TOLERANCE*	-10 ~ +70°C			±100			±100	PPM
	-40 ~ 85°C			±200			±200	PPM
INPUT CURRENT	1.0 ~ 30.0 MHz			23			9	mA
	30.1 ~ 80.0 MHz			35			20	mA
OUTPUT SYMMETRY	@ 1/2 V _{CC} Level	40/60		60/40	45/55		55/45	%
RISE AND FALL TIMES	1.0 ~ 30.0 MHz			8			6	ns
	30.1 ~ 80.0 MHz			7			6	ns
OUTPUT VOLTAGE	V _{OL}			+0.5			+0.4	V
	V _{OH}	V _{CC} -0.5			V _{CC} -0.4			V
OUTPUT LOAD	TTL			10				TTL
	CMOS			50			30	pF
START-UP TIME	1.0 ~ 30.0 MHz			4			4	ms
	30.1 ~ 80.0 MHz			10			10	ms
ENABLE/DISABLE TIME				100			100	ns

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

** An internal pullup resistor from pin 1 to 4 allows active output if pin 1 is left open.

PACKAGE DIMENSIONS (mm)

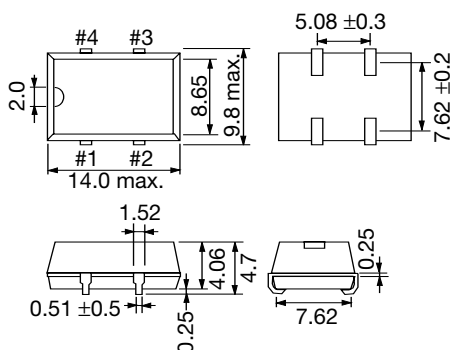


Figure 1) ECS-8FX Top and Side view

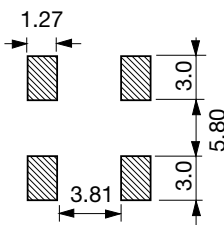


Figure 2) Land Pattern

PIN CONNECTIONS	
#1	TRI-STATE
#2	GND
#3	OUTPUT
#4	V _{CC}

TRI-STATE CONTROL VOLTAGE		
8FMX	8FA3X	OUTPUT
PIN 1	PIN 1	PIN 3
OPEN**	OPEN**	OSCILLATION
2V MIN	2.4V MIN	OSCILLATION
0.8 MAX	0.6 MAX	HIGH IMPEDANCE

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

ECS:

[ECS-8FMX-666-TR](#) [ECS-8FA3X-036-TR](#) [ECS-8FA3X-081.92-TR](#) [ECS-8FA3X-098.3-TR](#) [ECS-8FA3X-100-TR](#) [ECS-8FA3X-110.5-TR](#) [ECS-8FA3X-112.896-TR](#) [ECS-8FA3X-120-TR](#) [ECS-8FA3X-122.8-TR](#) [ECS-8FA3X-143-TR](#) [ECS-8FA3X-160-TR](#) [ECS-8FA3X-163-TR](#) [ECS-8FA3X-184-TR](#) [ECS-8FA3X-200-TR](#) [ECS-8FA3X-245.7-TR](#) [ECS-8FA3X-250-TR](#) [ECS-8FA3X-270-TR](#) [ECS-8FA3X-400-TR](#) [ECS-8FA3X-480-TR](#) [ECS-8FA3X-500-TR](#) [ECS-8FMX-010-TR](#) [ECS-8FMX-018-TR](#) [ECS-8FMX-020-TR](#) [ECS-8FMX-024-TR](#) [ECS-8FMX-035-TR](#) [ECS-8FMX-036-TR](#) [ECS-8FMX-040-TR](#) [ECS-8FMX-041-TR](#) [ECS-8FMX-049-TR](#) [ECS-8FMX-050-TR](#) [ECS-8FMX-060-TR](#) [ECS-8FMX-073-TR](#) [ECS-8FMX-080-TR](#) [ECS-8FMX-098.3-TR](#) [ECS-8FMX-100-TR](#) [ECS-8FMX-110.5-TR](#) [ECS-8FMX-120-TR](#) [ECS-8FMX-122.8-TR](#) [ECS-8FMX-147.4-TR](#) [ECS-8FMX-160-TR](#) [ECS-8FMX-184-TR](#) [ECS-8FMX-196.6-TR](#) [ECS-8FMX-200-TR](#) [ECS-8FMX-221-TR](#) [ECS-8FMX-240-TR](#) [ECS-8FMX-245.7-TR](#) [ECS-8FMX-250-TR](#) [ECS-8FMX-251.7-TR](#) [ECS-8FMX-270-TR](#) [ECS-8FMX-283.2-TR](#) [ECS-8FMX-300-TR](#) [ECS-8FMX-320-TR](#) [ECS-8FMX-330-TR](#) [ECS-8FMX-400-TR](#) [ECS-8FMX-480-TR](#) [ECS-8FMX-491.5-TR](#) [ECS-8FMX-500-TR](#) [ECS-8FMX-1.8432-TR](#)