

Voltage Controlled Oscillator

JTOS-75P

5V Tuning for PLL IC's 35 to 43 MHz

Features

- low phase noise
- 5V tuning voltage range
- linear tuning characteristics
- aqueous washable

Applications

- PLL circuitry
- measurement instrumentation
- frequency synthesizers



CASE STYLE: BK377
PRICE: \$14.95 ea. QTY (5-49)

Electrical Specifications

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies: Typ.				PULLING pk-pk @ 12 dB (MHz)	PUSHING (MHz/V)	TUNING SENSITIVITY (MHz/V)	HARMONICS (dBc)		3 dB MODULATION BANDWIDTH (MHz)	POWER SUPPLY	
	Min.	Max.		1 kHz	10 kHz	100 kHz	1 MHz				Typ.	Typ.		Typ.	Max.
JTOS-75P	35	43	+9	-89	-110	-130	-140	0.15	0.11	2.5-4	-25	-20	0.125	12	20

TUNING VOLTAGE TO COVER FREQUENCY RANGE 0.5V MIN. TO 5V MAX.

Pin Connections

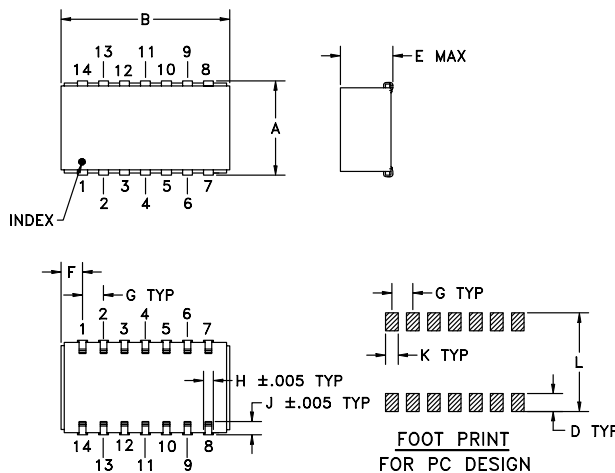
RFOUT	13
VCC	2
V-TUNE	5
GROUND	1,3,4,6,7,8,9,10,11,12,14

Maximum Ratings

Operating Temperature	-55°C to 85°C
Storage Temperature	-55°C to 100°C
Absolute Max. Supply Voltage (Vcc)	+16V
Absolute Max. Tuning Voltage (Vtune)	+7V

all specifications: 50 ohm system

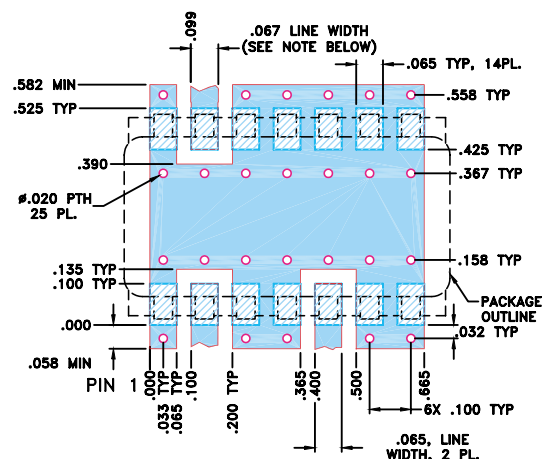
Outline Drawing



Outline Dimensions (inch/mm)

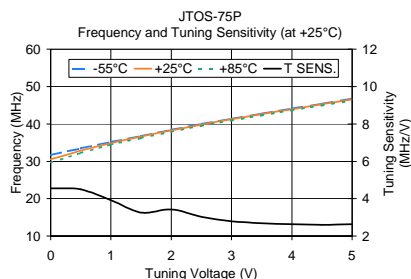
A	B	C	D	E	F	G	H	J	K	L	wt
.505	.800	--	.100	.250	.100	.100	.047	.065	.065	.525	grams
12.83	20.32	--	2.54	6.35	2.54	2.54	1.19	1.65	1.65	13.34	3.0

Demo Board MCL P/N: TB-04 Suggested PCB Layout (PL-005)

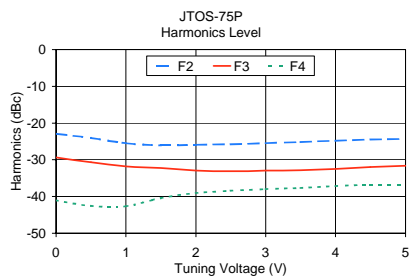
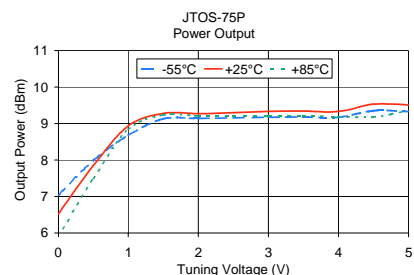


NOTE: TRACE WIDTH IS SHOWN FOR ROGERS RO4350
DIELECTRIC THICKNESS 0.030" ± 0.002,
COPPER: 1/2 OZ. EACH SIDE.
FOR OTHER MATERIALS TRACE WIDTH MAY NEED TO BE MODIFIED.

■ DENOTES PCB COPPER LAYOUT
■ DENOTES COPPER LAND PATTERN FREE OF SOLDER MASK



V TUNE	TUNING SENS. (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)		
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C
0.0	4.56	31.69	30.60	29.65	7.04	6.52	5.91
0.5	4.50	33.49	32.86	32.22	7.99	7.85	7.50
1.0	3.92	35.18	34.90	34.44	8.68	8.94	8.84
1.5	3.26	36.74	36.61	36.22	9.13	9.28	9.24
2.0	3.43	38.45	38.30	37.90	9.14	9.27	9.21
2.5	3.04	39.99	39.86	39.51	9.16	9.30	9.21
3.0	2.80	41.40	41.28	40.95	9.17	9.33	9.21
3.5	2.69	42.76	42.63	42.32	9.18	9.34	9.21
4.0	2.63	44.10	43.96	43.66	9.17	9.33	9.19
4.5	2.61	45.43	45.26	44.98	9.35	9.53	9.18
5.0	2.64	46.78	46.59	46.30	9.33	9.51	9.35



V TUNE	HARMONICS (dBc)			FREQ. PUSHING (MHz/V)
	F2	F3	F4	
0.0	-22.90	-29.40	-41.07	0.00
0.5	-24.07	-30.73	-42.57	0.06
1.0	-25.49	-31.82	-42.66	0.06
1.5	-26.11	-32.27	-40.44	0.19
2.0	-25.93	-32.93	-39.10	0.13
2.5	-25.79	-33.13	-38.46	0.06
3.0	-25.49	-32.99	-37.99	0.13
3.5	-25.17	-32.83	-37.67	0.00
4.0	-24.82	-32.49	-37.16	0.00
4.5	-24.50	-32.00	-36.83	-0.06
5.0	-24.31	-31.65	-36.81	0.00

