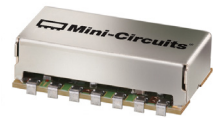


## Linear Tuning 37.5 to 75 MHz



CASE STYLE: BK377

### Features

- wide frequency range, 37.5 to 75 MHz
- linear tuning characteristics
- excellent harmonic suppression, -32 dBc typ.
- low phase noise, -152 dBc/Hz at 1 MHz offset
- aqueous washable

### Applications

- instrumentation
- VHF communication systems
- frequency synthesizers

### +RoHS Compliant

The +Suffix identifies RoHS Compliance. See our web site for RoHS Compliance methodologies and qualifications

### Electrical Specifications

MODEL NO.	FREQ. (MHz)		POWER OUTPUT (dBm)	PHASE NOISE dBc/Hz SSB at offset frequencies, kHz				TUNING				NON HARMONIC SPURIOUS (dBc)	HARMONICS (dBc)		PULLING pk-pk @12 dB (MHz)	PUSHING (MHz/V)	DC OPERATING POWER		
	Min.	Max.		Typ.	1	10	100	1000	VOLTAGE RANGE (V)	SENSITIVITY (MHz/V)	PORT CAP (pF)		3 dB MODULATION BANDWIDTH (MHz)	Typ.			Max.	Typ.	Typ.
JTOS-75(+)	37.5	75	+7.5	-90	-111	-131	-152	1	16	2.7 - 3.2	345	0.1	Typ.	-32	-20	0.05	0.11	12	20

### Pin Connections

RF OUT	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)	18V
All specifications	50 ohm system

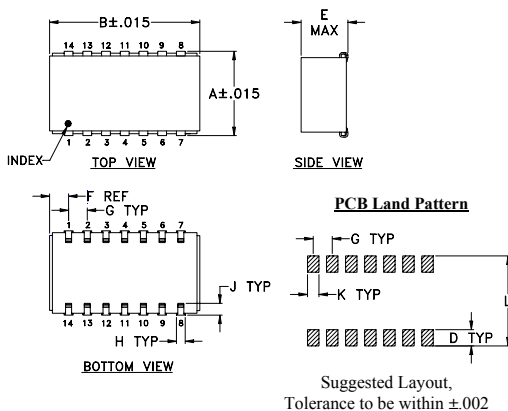
Permanent damage may occur if any of these limits are exceeded.

### Tape & Reel: F107

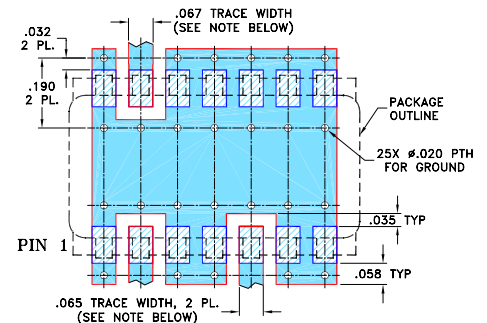
7" Reels with 10, 20, 50, 100 devices  
13" Reels with 200 devices

### Environmental Ratings: ENV65

### Outline Drawing



### Demo Board MCL PIN: TB-04 Suggested PCB Layout (PL-005)



### 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

### Notes

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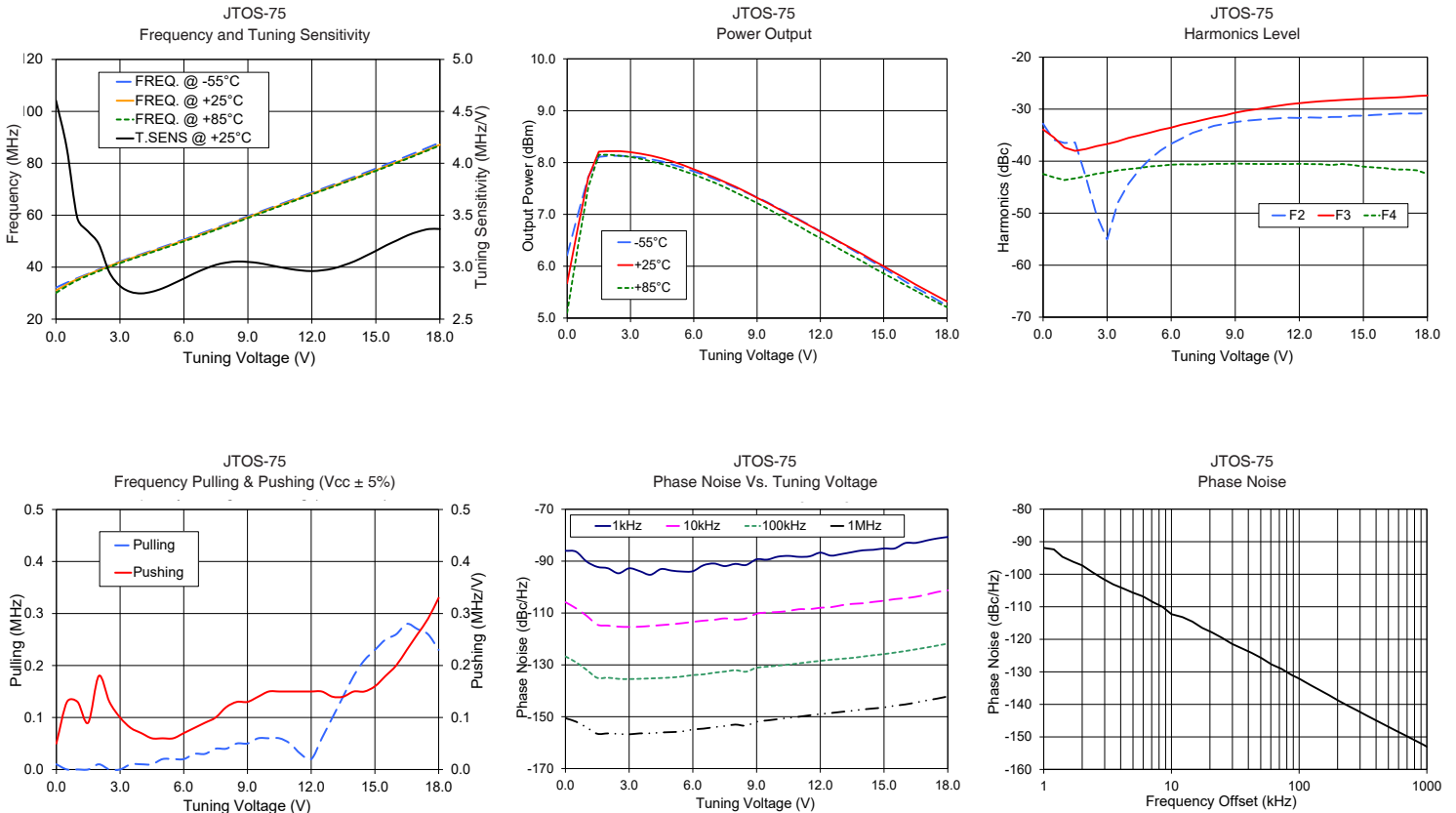
# NON-CATALOG

## Performance Data & Curves \*

## JTOS-75+

V TUNE	TUNE SENS (MHz/V)	FREQUENCY (MHz)			POWER OUTPUT (dBm)			Icc (mA)	HARMONICS (dBc)			FREQ. PUSH (MHz/V)	FREQ. PULL (MHz)	PHASE NOISE (dBc/Hz) at offsets				FREQ OFFSET (kHz)	PHASE NOISE at 56 MHz (dBc/Hz)
		-55°C	+25°C	+85°C	-55°C	+25°C	+85°C		F2	F3	F4			1kHz	10kHz	100kHz	1MHz		
0.00	4.61	32.1	31.0	30.1	6.21	5.67	5.10	14.94	-32.8	-33.9	-42.5	0.05	0.01	-86.00	-105.8	-126.7	-150.6	1.0	-91.90
1.00	3.47	35.8	35.4	35.0	7.72	7.71	7.52	14.58	-36.5	-37.4	-43.6	0.13	0.00	-90.16	-111.1	-131.9	-154.2	2.0	-97.28
1.50	3.35	37.4	37.1	36.8	8.11	8.21	8.15	14.39	-36.4	-38.0	-43.3	0.09	0.00	-92.20	-114.5	-135.0	-156.6	3.5	-103.11
2.00	3.23	39.1	38.8	38.4	8.13	8.22	8.15	14.36	-43.0	-37.7	-42.9	0.18	0.01	-92.74	-114.9	-134.9	-156.4	6.0	-106.83
3.00	2.82	42.2	41.9	41.6	8.12	8.20	8.11	14.40	-55.1	-36.7	-42.1	0.10	0.00	-92.75	-115.4	-135.5	-156.8	8.5	-110.00
4.00	2.75	45.0	44.7	44.4	8.06	8.13	8.02	14.41	-44.3	-35.5	-41.5	0.07	0.01	-95.25	-115.0	-135.2	-156.4	10.0	-112.26
5.00	2.80	47.8	47.5	47.1	7.96	8.02	7.91	14.42	-39.6	-34.5	-41.0	0.06	0.02	-93.64	-114.3	-134.9	-155.9	20.8	-117.88
6.00	2.89	50.6	50.3	50.0	7.83	7.87	7.77	14.41	-36.7	-33.6	-40.7	0.07	0.02	-93.87	-113.4	-133.9	-154.9	35.6	-122.79
7.00	2.99	53.6	53.2	52.9	7.68	7.71	7.61	14.40	-34.6	-32.5	-40.6	0.09	0.03	-90.92	-112.6	-133.0	-154.0	60.8	-127.73
8.00	3.04	56.6	56.2	55.9	7.51	7.53	7.42	14.39	-33.2	-31.6	-40.5	0.12	0.04	-91.06	-112.5	-132.1	-153.0	86.9	-130.90
8.50	3.05	58.1	57.7	57.4	7.42	7.43	7.32	14.39	-32.8	-31.2	-40.5	0.13	0.05	-91.49	-112.1	-132.6	-153.5	100.0	-132.08
9.00	3.05	59.6	59.2	58.9	7.33	7.32	7.22	14.39	-32.5	-30.7	-40.5	0.13	0.05	-89.29	-110.3	-131.1	-151.9	145.8	-135.68
10.00	3.02	62.7	62.3	62.0	7.12	7.11	7.00	14.38	-32.1	-30.0	-40.5	0.15	0.06	-88.27	-109.6	-130.3	-150.9	171.2	-137.16
11.00	2.98	65.7	65.3	65.0	6.90	6.89	6.77	14.39	-31.8	-29.4	-40.5	0.15	0.05	-88.34	-108.5	-129.4	-150.0	204.6	-138.92
12.00	2.96	68.7	68.3	68.0	6.67	6.67	6.54	14.38	-31.7	-28.9	-40.5	0.15	0.02	-86.73	-108.0	-128.5	-149.0	287.3	-141.95
13.00	2.99	71.7	71.2	71.0	6.44	6.45	6.31	14.38	-31.7	-28.5	-40.6	0.14	0.10	-87.26	-107.0	-127.7	-148.1	337.4	-143.42
13.50	3.02	73.3	72.7	72.5	6.32	6.34	6.20	14.39	-31.5	-28.4	-40.8	0.14	0.14	-86.52	-106.5	-127.3	-147.7	473.6	-146.42
14.00	3.06	74.8	74.2	74.0	6.20	6.23	6.09	14.39	-31.5	-28.2	-40.6	0.15	0.18	-85.82	-106.3	-126.8	-147.2	566.2	-147.98
15.00	3.16	78.0	77.3	77.1	5.96	6.00	5.86	14.39	-31.3	-28.0	-41.1	0.16	0.23	-85.10	-105.3	-125.8	-146.4	933.4	-152.32
16.00	3.26	81.2	80.5	80.2	5.71	5.77	5.64	14.40	-31.0	-27.9	-41.3	0.20	0.26	-83.01	-104.3	-124.7	-145.3	1000.0	-153.01

\*at 25°C unless mentioned otherwise



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