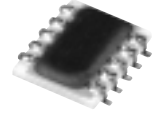


Surface Mount

# Frequency Doublers

1.6 to 4.8 GHz

KBA-20 • KBA-40



**BLUE CELL™**

CASE STYLE:	SM2	
MODEL	PRICE	QTY
KBA-20	\$9.95 ea.	(10-49)
KBA-40	\$14.95 ea.	(1-9)

### Features

- low conversion loss, 12 dB typ.
- solder plated leads for strain relief and excellent solderability

### Applications

- synthesizers
- local oscillators

### Frequency Doubler Electrical Specifications

MODEL NO.	FREQUENCY (GHz)		INPUT POWER (dBm)		CONVERSION LOSS (dB)			HARMONIC OUTPUT (dBc)					
	Input	Output	Min.	Max.	Input Freq.	Typ.	Max.	F1 Typ.	F3 Typ.	F4 Typ.	F1 Min.	F3 Min.	F4 Min.
KBA-20	1.6 - 2.2	3.2 - 4.4	11	15	1.6-2.2	12	15.8	12	7	20	13	23	10
KBA-40	2.7-4.8	5.4-9.6	10	16	2.7-4.8	12.3	17.6	18	10	26	15	24	14
			5	10	2.7-4.8	13	19	15	8	26	16	26	12

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### Pin Connections

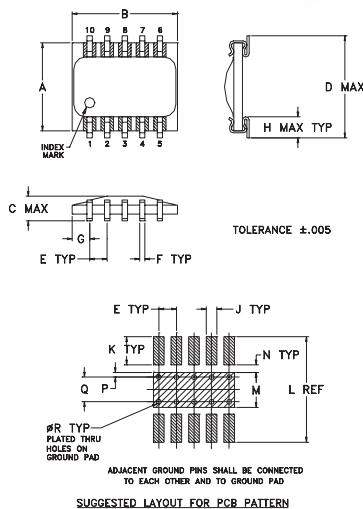
MODEL	KBA-20	KBA-40
INPUT	10	10
OUTPUT	5	6
SAMPLE*	3	—
50Ω TERMINATED	—	1
GROUND	1,2,4,6,7,8,9	2,3,4,5,7,8,9

\*sample port output power, -10 dBc typ.  
Terminate in 50 ohms if not used.

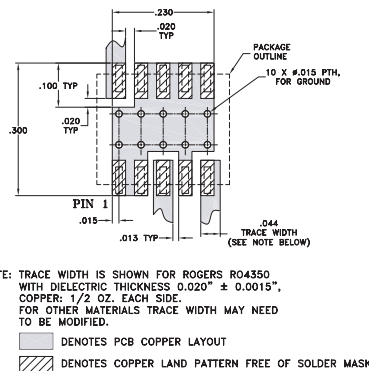
### Maximum Ratings

Operating Temperature	-40°C to 85°C
Storage Temperature	-55°C to 100°C

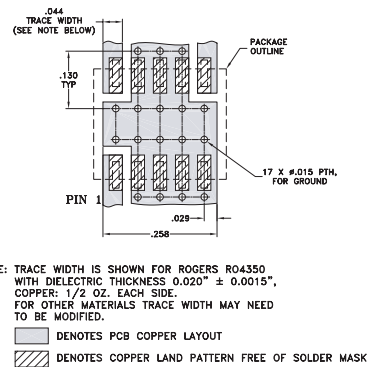
### Outline Drawing



### KBA-20 Demo Board MCL P/N: TB-99 Suggested PCB Layout (PL-066)



### KBA-40 Demo Board MCL P/N: TB-74 Suggested PCB Layout (PL-067)



### Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	N	P	Q	R	wt.
.250	.300	.070	.290	.050	.015	.050	.060	.030	.080	.300	.100	.020	.015	.070	.014	grams
6.35	7.62	1.78	7.37	1.27	.38	1.27	1.52	0.76	2.03	7.52	2.54	0.51	.38	1.78	.36	.3