

Ceramic

Frequency Mixer

Level 13 (LO Power +13 dBm) 1850 to 1910 MHz

New!
MCA-19FMH



BLUE CELL™

CASE STYLE: DZ883
PRICE: \$10.95 ea. QTY (1-9)
(Patent pending)

Features

- excellent IP3, 30 dBm typ.
- excellent L-R isolation, 40 dB typ.
- excellent compression, 1 dB compr, RF>LO power
- industry standard foot print
- LTTC design for excellent temperature stability
- performance repeatability and small size
- water wash capability
- double balanced mixer
- low price

Applications

- GSM 1800
- DECT

Mixer Electrical Specifications (T_{AMB} = -55°C to 100°C)

MODEL NO.	FREQUENCY (MHz)			IP3 (dBm)	RF @ 1dB compr. (dBm) Min.	CONVERSION LOSS (dB)			LO-RF ISOLATION (dB)		LO-IF ISOLATION (dB)		E FACTOR
	RF	LO	IF			Typ.	σ	Max.	Typ.	Min.	Typ.	Min.	
MCA-19FMH	1850-1910	1760-1820	70-130	30	13	6.9	—	8.4	40	22	39	20	1.7

E= (IP3(dBm)-LO Power(dBm))/10

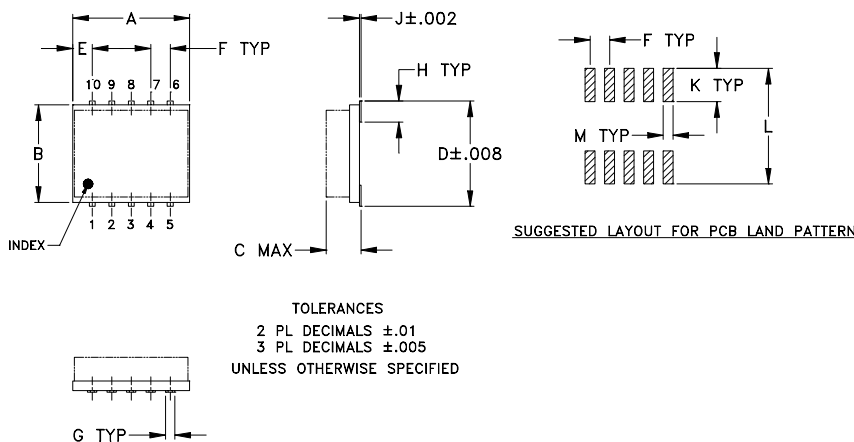
Pin Connections

LO	10
RF	5
IF	3
GROUND	1,2,4,6,7,8,9

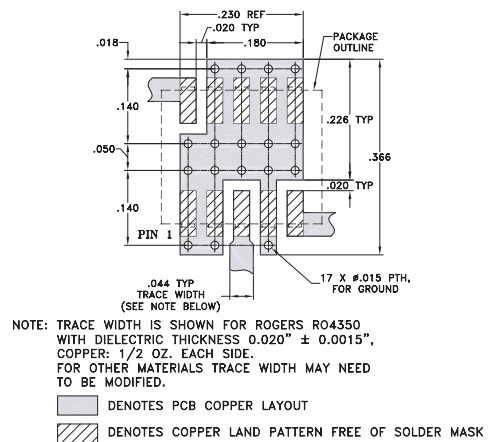
Maximum Ratings

Operating Temperature	-55°C to 100°C
Storage Temperature	-55°C to 100°C
LO & RF Power	16 dBm

Outline Drawing



Demo Board MCL P/N: TB-144 Suggested PCB Layout (PL-045)



Outline Dimensions (inch/mm)

A	B	C	D	E	F	G	H	J	K	L	M	wt.
.30	.250	.180	.274	.050	.050	.024	.05	.004	.085	.296	.030	grams
7.62	6.35	4.57	6.96	1.27	1.27	0.61	1.27	0.10	2.16	7.52	0.76	0.5



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ISO 9001 CERTIFIED

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REV. C
M85169
ED-9488A/2
MCA-19FMH
DJ/TD/CP
030206
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Typical Performance Data at 25°C

Frequency		Conversion Loss (dB)	Isolation L-R (dB)	Isolation L-I (dB)	IP3 (dBm)
RF MHz	LO MHz	LO +13 dBm	LO +13 dBm	LO +13 dBm	LO +13 dBm
1850.00	1760.00	6.85	43.51	45.47	30.46
1865.00	1775.00	6.87	42.53	46.32	31.19
1880.00	1790.00	6.86	41.50	43.61	31.17
1895.00	1805.00	6.85	41.15	40.87	31.16
1910.00	1820.00	6.80	41.04	39.00	30.98

Performance Charts

