



DESIGNER'S KIT K2-MCA+

# Frequency Mixers

50Ω 1760 to 3600 MHz



## FEATURES

- High IP3, to +35 dBm
- Excellent L-R isolation, to 44 dB typ.
- Large selection of models, LO levels 10, 13 & 17dBm
- Low conversion loss, 7dB
- Small size, ( L ) 0.25" x ( W ) 0.3" x ( H ) 0.19"
- Low cost

MINI-CIRCUITS DESIGNER'S KITS  
**SPEED UP**  
THE SOLUTION



## K2-MCA+ ELECTRICAL SPECIFICATIONS

(9 models, 2 of each, 18 total)

Model	LO level (dBm)	Frequency (MHz)			Conversion Loss (dB)	RF In @ 1 dB Compr. (dBm)	IP3 (dBm)	LO-RF Isolation (dB)	LO-IF Isolation (dB)
		LO/RF	RF	IF					
MCA-19FLH+	10.0	1760-1820	1850-1910	70-130	6.9	10.0	25	40	39
MCA-30FLH+	10.0	2780-2880	2960-3060	130-230	7.5	10.0	25	35	27
MCA-36FLH+	10.0	3070-3170	3500-3600	380-480	8.4	10.0	25	40	28
MCA-19FMH+	13.0	1760-1820	1850-1910	70-130	6.9	13.0	30	40	39
MCA-30FMH+	13.0	2780-2880	2960-3060	130-230	7.4	13.0	30	35	27
MCA-36FMH+	13.0	3070-3170	3500-3600	360-480	8.3	13.0	30	42	27
MCA-19FH+	17.0	1760-1820	1850-1910	70-130	6.9	17.0	35	40	39
MCA-30FH+	17.0	2780-2880	2960-3060	130-230	7.4	17.0	34	37	27
MCA-36FH+	17.0	3070-3170	3500-3600	380-480	8.3	17.0	33	44	29

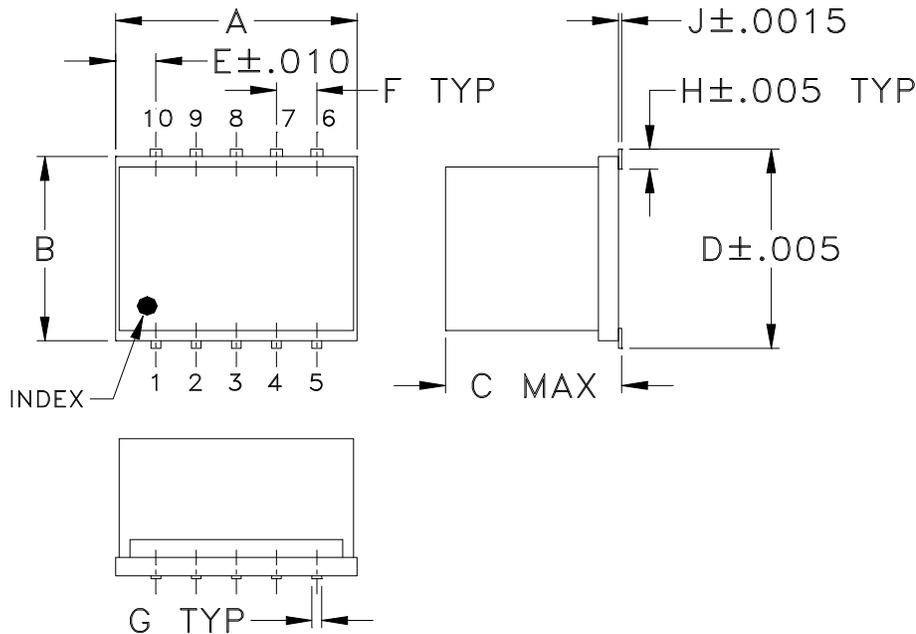
Protected under U.S. Patent 6, 959, 180



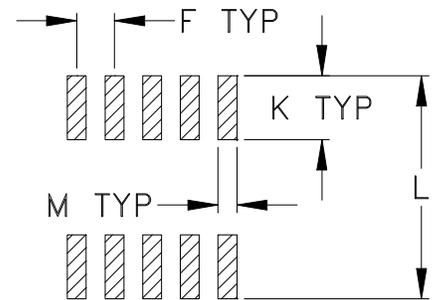
[www.minicircuits.com](http://www.minicircuits.com) P.O. Box 350166, Brooklyn, NY 11235-0003 (718) 934-4500 sales@minicircuits.com

REV. A  
ECO-009343  
K2-MCA+  
MCL NY  
210820

### Outline Dimensions



### PCB Land Pattern



Suggested Layout,  
Tolerance to be within  $\pm.002$

CASE#	A	B	C	D	E	F	G	H	J	K	L	M	WT. GRAMS
DZ883	.30 (7.62)	.250 (6.35)	.190 (4.83)	.266 (6.76)	.050 (1.27)	.050 (1.27)	.012 (0.30)	.029 (0.74)	.004 (0.10)	.085 (2.16)	.296 (7.52)	.030 (0.76)	0.5

Dimensions are in inches (mm). Tolerances: 2Pl.  $\pm.01$ ; 3Pl.  $\pm.005$

#### Notes:

- Case material: Ceramic.
- Termination finish:
  - For RoHS Case Styles: Tin plate. All models, (+) suffix.
  - For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.

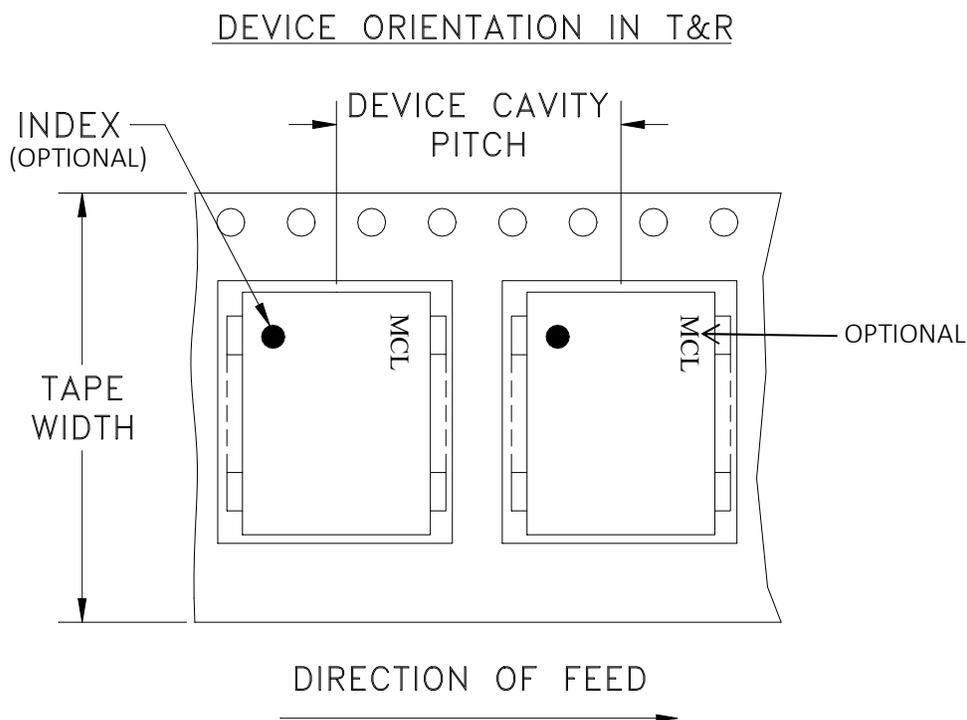


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Mini-Circuits ISO 9001 & ISO 14001 Certified

# Tape & Reel Packaging TR-F34



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel see note	
16	12	7	Small quantity standard (see note)	20
				50
				100
				200
		13	Standard	500
1000				

Note: Availability of small reel quantity varies by model.  
Refer to pricing and availability on individual model dashboard.

Mini-Circuits carrier tape materials provide protection from ESD (Electro-Static Discharge) during handling and transportation. Tapes are static dissipative and comply with industry standards EIA-481/EIA-541.

Go to: [www.minicircuits.com/pages/pdfs/tape.pdf](http://www.minicircuits.com/pages/pdfs/tape.pdf)



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