

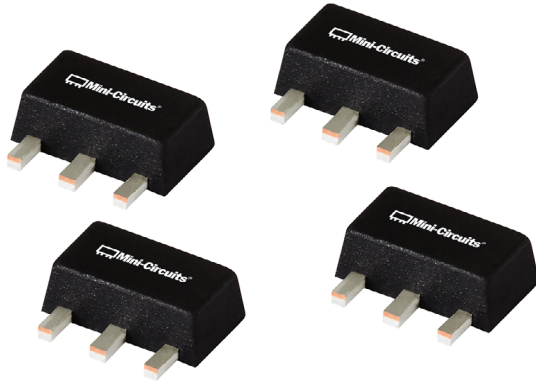


Mini-Circuits®

DESIGNER'S KIT K5-GALI+

Wideband Amplifiers

50Ω DC to 4 GHz



FEATURES

- Wideband, 50 Ω
- InGaP HBT microwave
- Up to 15.9 dBm output power
- Usable to 6 GHz
- Transient and ESD protected
- Miniature SOT-89 package
- Exposed metal bottom
- Excellent heat dissipation
- Low thermal resistance

 MINI-CIRCUITS DESIGNER'S KITS
SPEED UP
 THE SOLUTION

 Evaluation boards available.
 See individual model data sheets.


K5-GALI+ ELECTRICAL SPECIFICATIONS

(kit includes 5 models, 10 of each, 50 total)

Model	Freq. ¹ (GHz)	Gain (dB) Typical							Maximum Power ² (dBm) @ 1 GHz			Dynamic Range @ 1 GHz		VSWR (:1) Typ.				Max. Rating ³		DC ⁴ Operating Power @ pin 3				Therm. Resist.	Evaluation Board
		Over frequency, GHz							Output (1dB Compr.)		Input ³ (dBm)	NF (dB) Typ.	IP3 (dBm) Typ.	In DC-3 GHz	In 3-f _u GHz	Out DC-3 GHz	Out 3-f _u GHz	I (mA)	P (mW)	Cur- rent (mA)	Device Volt.			θjc Typ. °C/W	
		0.1	1	2	3	4	6	Min @ 2 GHz	Typ.	Min											Typ.	Min.	Max		
GALI6F+	DC-4	12.1	12.0	11.6	11.4	10.9	12.3	10	15.8	14.3	20	4.5	35.5	1.5	1.5	1.9	2.2	65	350	50	4.8	4.2	5.4	93	TB-409-6F+
GALI4F+	DC-4	14.3	14.0	13.4	13.0	12.3	13.2	11	15.3	13.8	20	4.0	32	1.2	1.2	1.5	1.8	65	325	50	4.4	4.0	5.0	93	TB-409-4F+
GALI51+	DC-4	18.0	17.3	15.9	14.8	13.4	13.3	14	15.9	14.4	13	3.5	32	1.2	1.3	1.5	1.7	65	325	50	4.4	4.0	5.0	78	TB-409-51F+
GALI5F+	DC-4	20.4	19.3	17.4	16.0	14.8	15.1	15.5	15.7	14.2	13	3.5	31.5	1.2	1.2	1.4	1.4	65	325	50	4.3	3.9	4.9	103	TB-409-5F+
GALI55+	DC-4	21.9	20.6	18.5	17.0	15.5	15.7	17	15.0	13.5	13	3.3	28.5	1.25	1.35	1.3	1.5	65	350	50	4.3	3.8	4.8	100	TB-409-55+

Protected under U.S. Patent 6,943,629

1. Low frequency cutoff determined by external coupling capacitors. f_u is the upper frequency limit for each model.

2. Models tested at 1 GHz except Gali-55+ at 2 GHz.

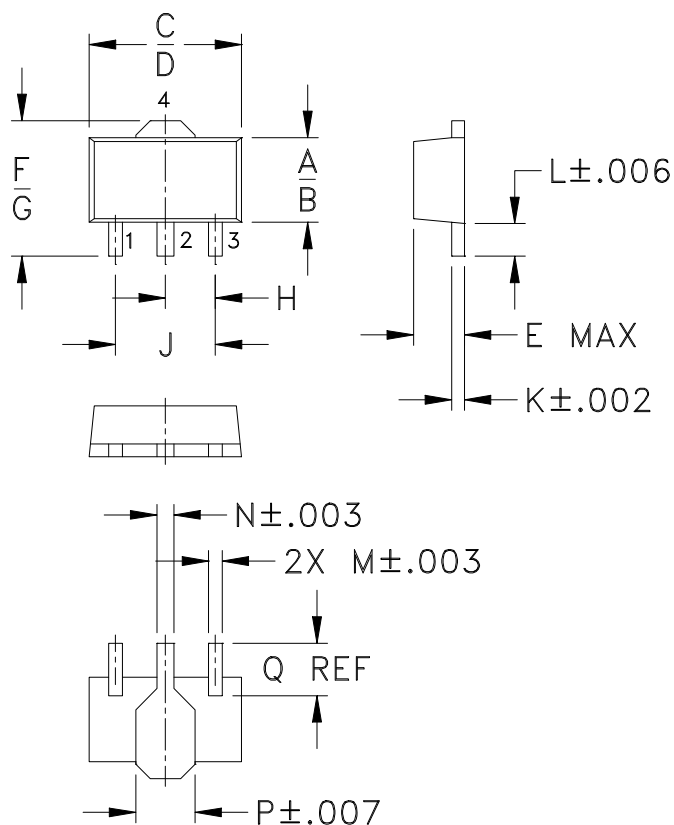
3. Permanent damage may occur if any of these limits are exceeded. These ratings are not intended for continuous normal operation.

4. Supply voltage must be connected to pin 3 through a bias resistor in order to prevent damage. Reliability predictions are applicable at specified current and normal operating conditions.

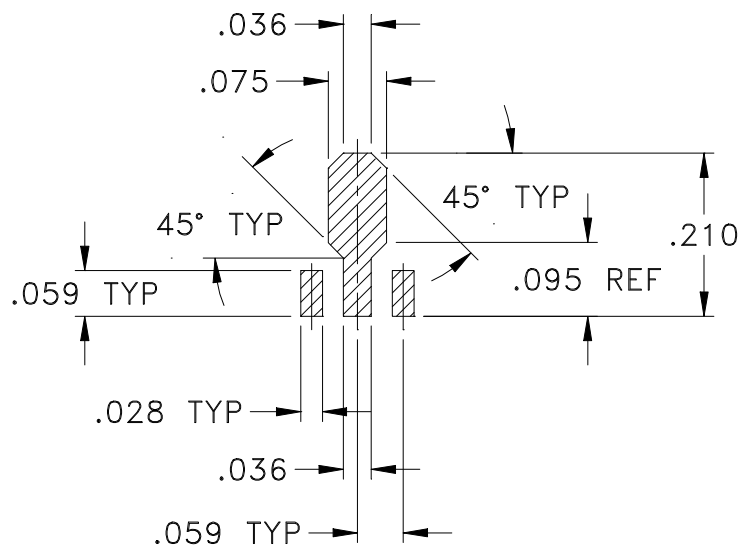
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 REV. C
 ECO-009046
 K5-GALI+
 MCL NY
 080221

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
DF782	.102 (2.59)	.090 (2.29)	.181 (4.60)	.173 (4.39)	.063 (1.60)	.167 (4.24)	.155 (3.94)	.059 (1.50)	.118 (3.00)	.015 (0.38)	.041 (1.04)	.016 (0.41)

CASE #	N	P	Q	WT. GRAM
DF782	.019 (0.48)	.065 (1.65)	.062 (1.57)	.2

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

Notes:

- Case material: Plastic.
- Termination finish:
For RoHS Case Styles: Tin-Silver alloy plate over Nickel barrier or Matte-Tin.
All models, (+) suffix. See model Data sheet.
For RoHS-5 Case Styles: Tin-Lead plate. All models, no (+) suffix.



INTERNET <http://www.minicircuits.com>

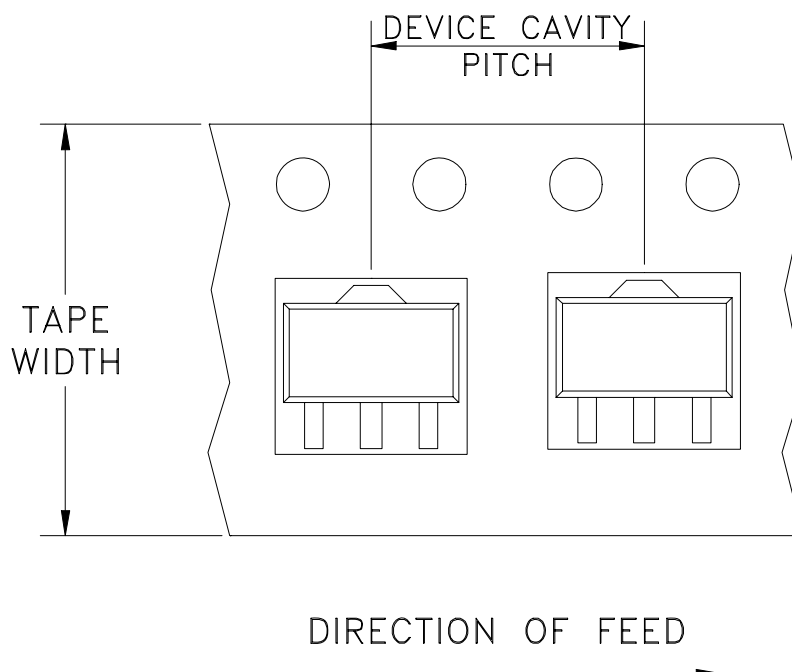
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Mini-Circuits ISO 9001 & ISO 14001 Certified

Tape & Reel Packaging TR-F55

DEVICE ORIENTATION IN T&R



Tape Width, mm	Device Cavity Pitch, mm	Reel Size, inches	Devices per Reel	
12	8	7	Small quantity standard (see note)	20
				50
				100
				200
				500
			Standard	1000

Note: Please consult individual model data sheet to determine device per reel availability.

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



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