

TITLE: SPECIFICATION CONTROL DRAWING

PART IDENTIFIER: 5307ALN

DESCRIPTION: HIGH POWER LOAD, ALUMINUM NITRIDE, (THICK FILM)

ASSEMBLY DWG: 1700374

1.0 SPECIFICATIONS:

- 1.1 ELECTRICAL:
 - 1.1.1 RESISTANCE VALUE: 50Ω NOMINAL.
 - 1.1.2 INPUT POWER: 125 WATTS AT 100°C HEAT SINK, DERATED LINEARLY TO ZERO WATTS AT 150°C.
 - 1.1.3 FREQUENCY RANGE: DC - 2.0 GHZ.
 - 1.1.4 VSWR: 1.25 MAX.

- 1.2 MECHANICAL:
 - 1.2.1 OUTLINE DWG: SEE SHEET 2.
 - 1.2.2 WORKMANSHIP: PER MIL-PRF-55342.

- 1.3 ENVIRONMENTAL:
 - 1.3.1 TEMPERATURE RANGE:
 - 1.3.1.1 STORAGE: -65°C TO +150°C.
 - 1.3.2.1 OPERATING: -55°C TO +150°C.

2.0 UNIT MARKING: "EMCT" AND PART IDENTIFIER.
LEGIBILITY AND PERMANENCY PER MIL-STD-130.

3.0 QUALITY ASSURANCE:

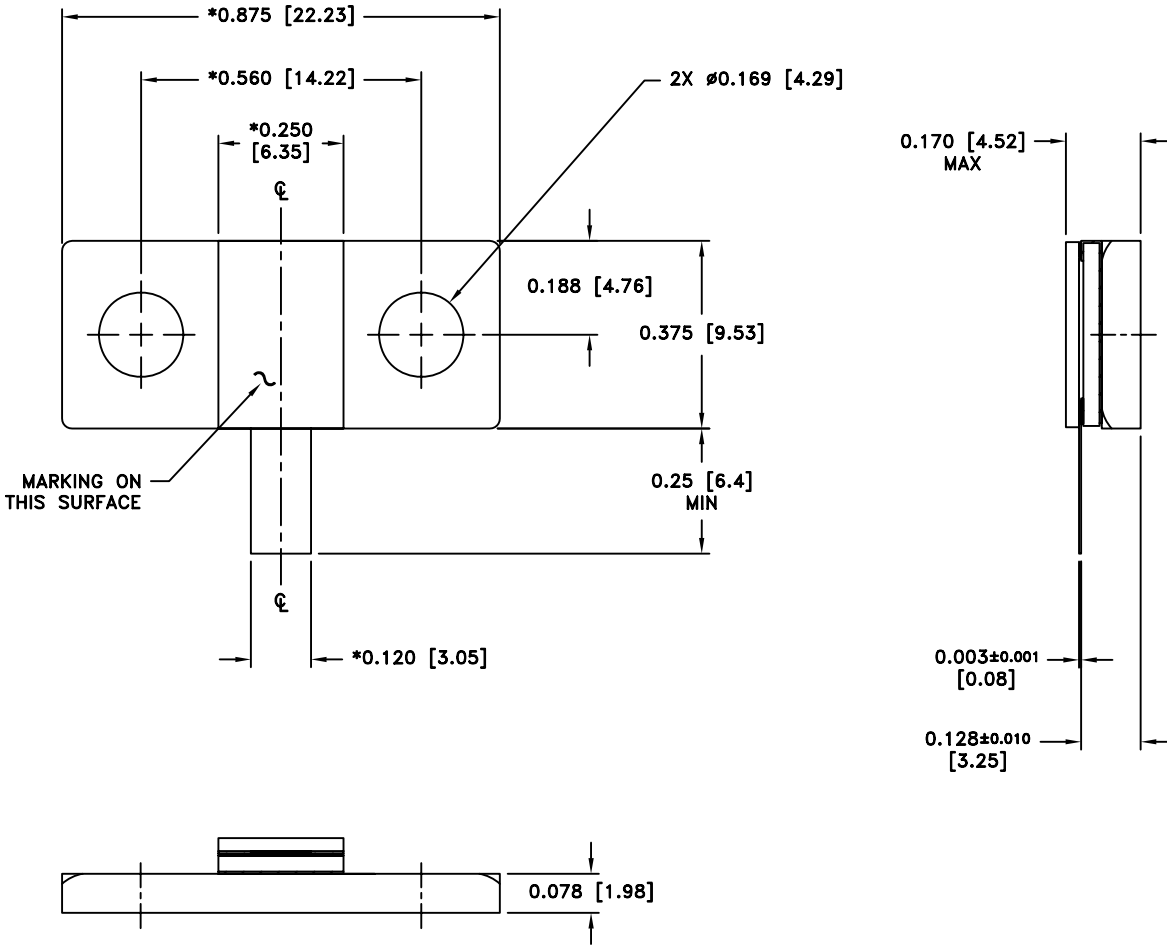
- 3.1 VISUAL AND MECHANICAL PER 824W155.
- 3.2 100% DC RESISTANCE CHECK (GO/NO GO): 50Ω ± 5%.
- 3.3 DATA REQUIREMENTS:
 - 3.3.1 NO TEST DATA REQUIRED FOR CUSTOMER.
 - 3.3.2 DATA RETENTION – 24 MONTHS.

4.0 PACKAGING: STANDARD PACKING PER 755W002.

EMC TECHNOLOGY 8851 SW OLD KANSAS AVE. STUART, FL 34997	CAGE CODE # 24602		DWG #	1008435000
	CHANGE NOTICE	EN 08-E0341	REV LVL	J
			SHEET	1 <u>OF</u> 2

PART ID REF

5307ALN



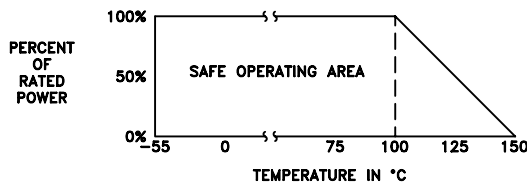
MECHANICAL SPECIFICATIONS:

- CHIP:
 - MATERIAL - SUBSTRATE - ALUMINUM NITRIDE, MIL-I-10.
 - RESISTIVE ELEMENT - THICK FILM.
- TOP PLATE:
 - MATERIAL - ALUMINA, MIL-I-10.
- TAB:
 - MATERIAL - COPPER, ASTM B152.
 - FINISH - SILVER, QQ-S-365.
- HEAT SINK:
 - MATERIAL - COPPER, ASTM B187.
 - FINISH - NICKEL, QQ-N-290.

METRIC EQUIVALENTS GIVEN IN [mm] FOR REFERENCE INFORMATION ONLY

ALLOW ± 0.010 ON TOP PLATE FOR MISALIGNMENT.
 *DIMENSIONS TO BE SYMMETRICAL ABOUT C.L. WITHIN ± 0.005 .

POWER RATING AND DERATING



8851 SW OLD KANSAS AVE
 STUART, FL 34997
 PHONE NO. (772)286-9300
 FAX NO. (772)283-5286

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES

TOLERANCES

FRACT	---
ANG	---
XX	---
XXX	± 0.005
XXXX	---

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CAGE CODE	SCALE	DRAWN BY	CHECKED BY	APPROVED BY
24602	4:1	JG 5/1/08		
REV	CHANGE NOTICE	DRAWING NO	SHEET	
J	EN 08-E0341	1008435000	2 OF 2	