APPLICATION SPECIFICATION

1. SCOPE

This specification covers 2 cavity designs and the requirements for application of .187 box height MAG-MATE* Standard Series terminals. These requirements are applicable to hand and automatic machine application tools. For specific terminal part numbers, wire and interface combinations, see Figure 8.

2. NOMENCLATURE

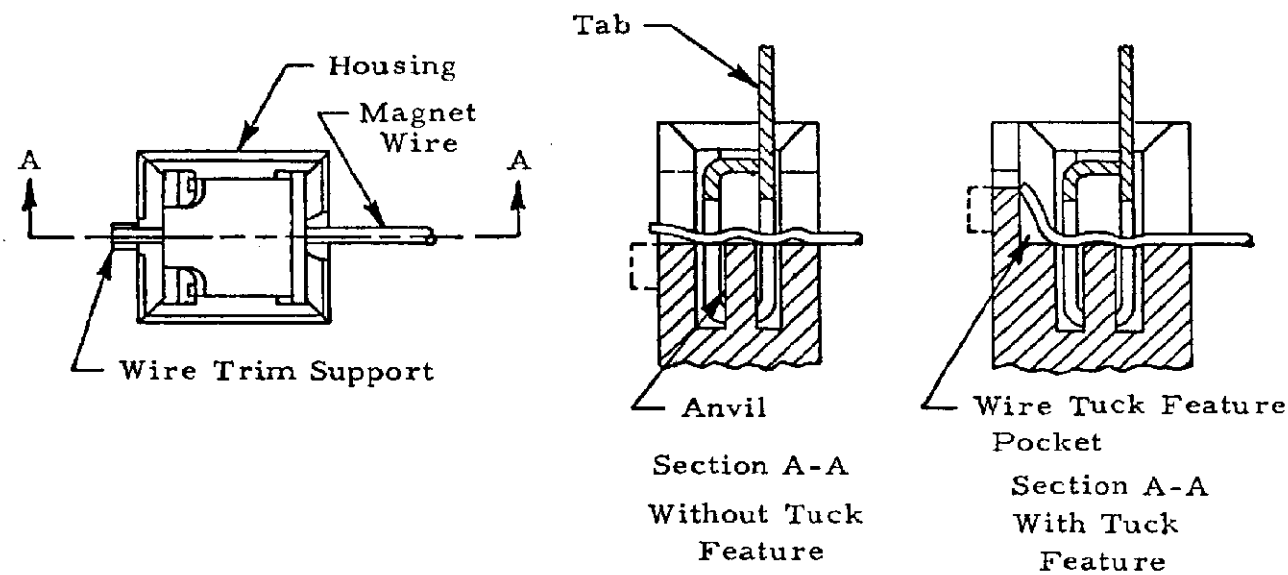

Figure 1

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				APP Charles A. Atherton (12/5/85	NO 114-2069	REV C	LOC B
C	Revise per ECN AF-1384	TLC	12/6/85	DIST 02	TITLE TERMINAL, MAG-MATE STANDARD SERIES, .187 BOX HEIGHT		
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LTR	REVISION RECORD	APP	DATE				

3. REQUIREMENTS

3.1. Cavity Design

Optional housing cavity designs that will accept MAG-MATE Standard Series terminals manufactured by AMP Incorporated shall be in accordance with the requirements specified in Para 3.1.A. or 3.1.B. Customers are requested to supply AMP Engineering with drawings of their final design for review and approval, for insertion equipment compatibility.

A. Cavity Option 1

Cavity option 1 is a straight thru slot which leaves the trimmed end of the magnet wire exposed and may be used in applications where isolation of the conductor end is not required.

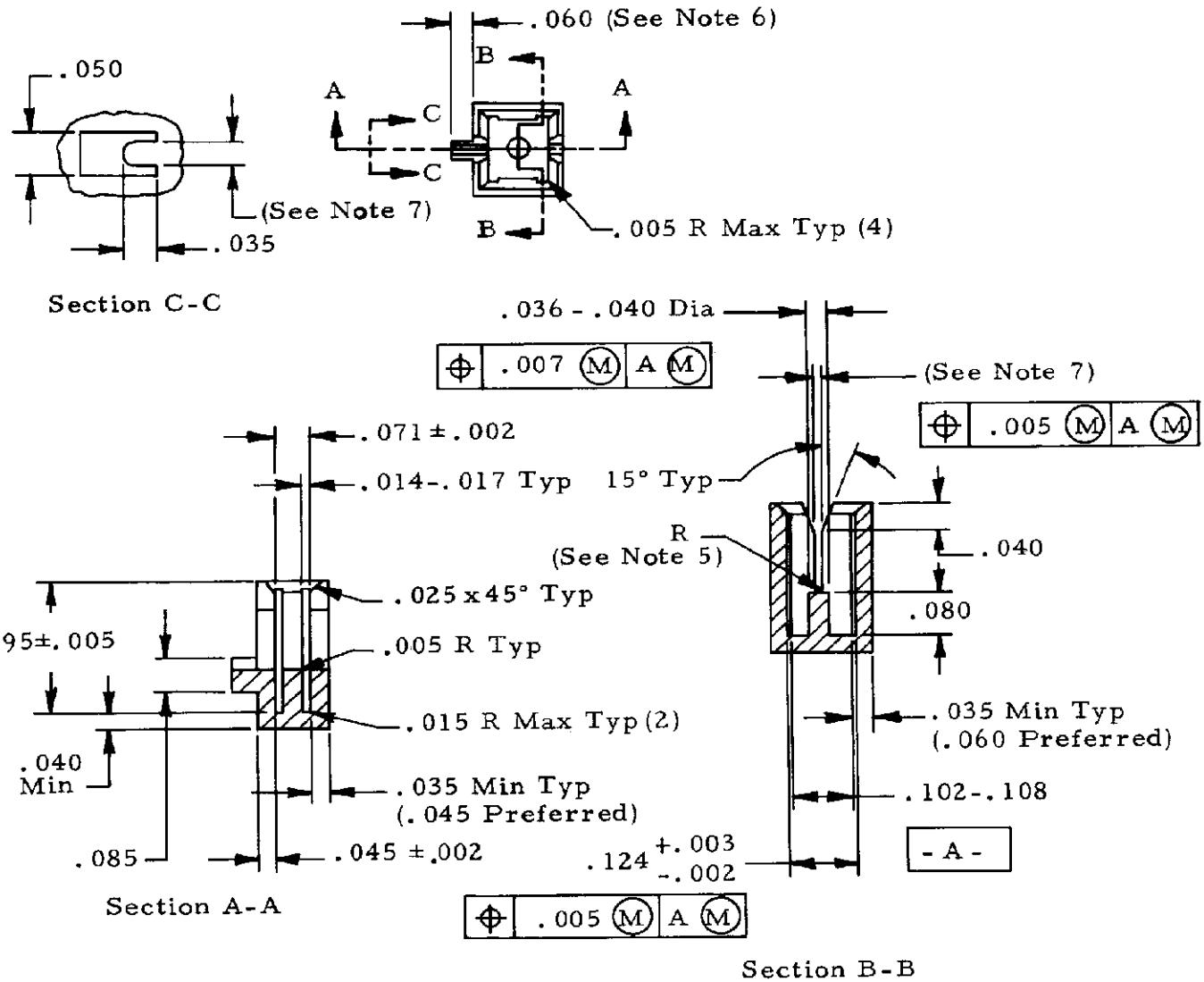


Figure 2 (cont)

Notes:

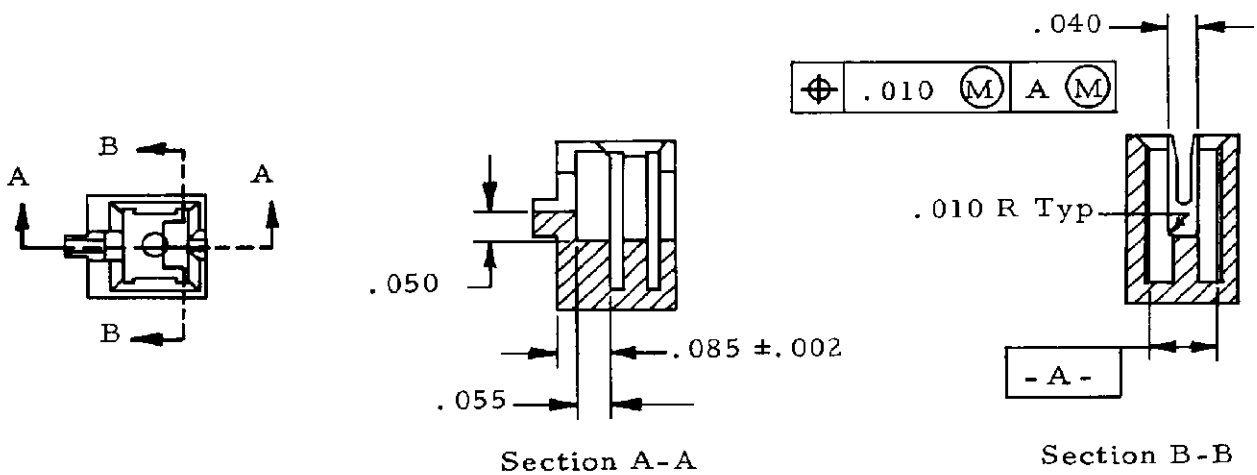
1. All dimensions are in inches.
2. Tolerances unless otherwise specified are ±.005 and angles ±1°.
3. Material shall be glass filled polyester or AMP Engineering approved equivalent.
4. Wall thickness on trim side shall be equal on multi-cavity housings, to provide excess magnet wire trim by applicator.
5. Coil windings and other assembly components shall not extend above base of wire slot or obstruct proper seating of magnet wire in slot.
6. Wire trim support shall be on wire trim side only. Applicator will trim off both wire and wire trim support. Wire trim support is not necessary if magnet wire is hand trimmed.
7. Slot width should be .002-.004 smaller than the largest magnet wire diameter being terminated.
8. Draft angles shall be held within the feature tolerances.

Figure 2 (end)

Cavity Design Option 1

B. Cavity Option 2

Cavity option 2 has a tuck feature which allows the terminal to pull the exposed end of the trimmed magnet wire into a pocket inside the cavity for total magnet wire isolation.



Note: Same as Figure 2, except wire-tuck feature added.

Figure 3

Cavity Design Option 2

3.2. Wire Placement

Magnet wire shall be prelaced at the base of the cavity wire slots before terminal insertion.

3.3. Terminal Insertion Depth

Terminal shall be inserted in the housing cavity within the limits specified in Figure 4.

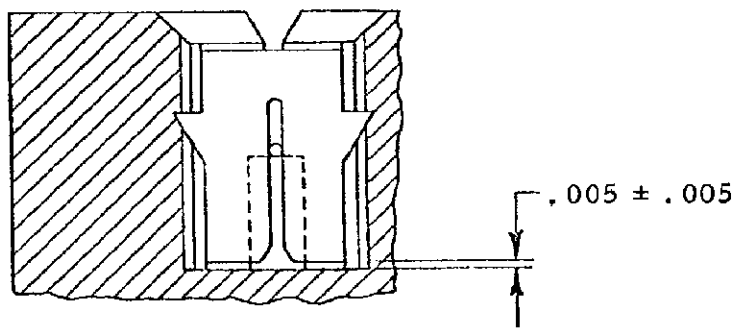


Figure 4

3.4. Wire Position

A. Magnet wire shall contact the top of the cavity anvil as indicated in Figure 5 when terminals are inserted into cavity design option 1, (see Figure 2).

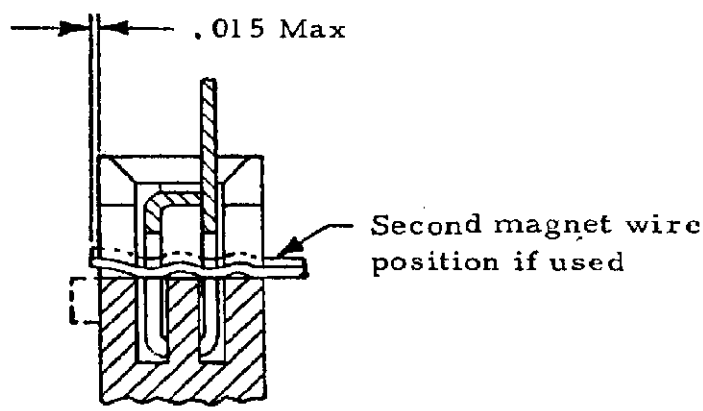


Figure 5

B. Magnet wire shall contact the top of the cavity anvil as indicated in Figure 6 when terminals are inserted in cavity design option 2 (see Figure 3), which contains a wire trim support and wire tuck feature pocket. This cavity contains a wire trim support, on which the magnet wire rests prior to terminal insertion, and is removed during the application process. After termination the magnet wire is positioned within the confines of the wire tuck feature pocket as indicated in Figure 6.

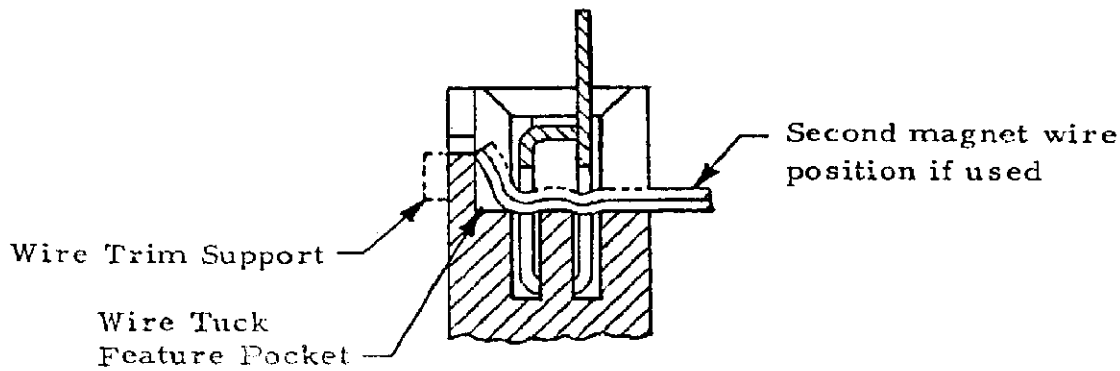


Figure 6

3.5. Terminal Cutoff Tab and Burr

A. Cutoff Tab

Terminal cutoff tabs shall be within the limits specified in Figure 7.

B. Burr

Burr on cutoff tabs shall not exceed .003.

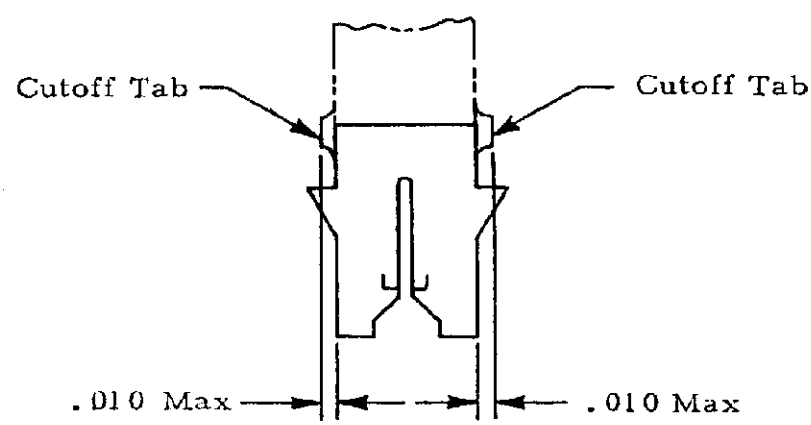


Figure 7

Part Numbers		Magnet Wire				Interface Type
Strip	Loose Piece	Aluminum		Copper		
		Qty(a)	Size	Qty(a)	Size	
62938	62934			1 or 2	33-31	.050 x .010 Tab
63160				1 or 2	30-28	.050 x .010 Tab
62430	62874			1 or 2	30-28	.050 x .012 Tab
62438				1 or 2	27-25	
62439				1	24-22	
62607				1 or 2	33-31	"F" Crimp Wire Barrel (b)
63039				1 or 2	32-31	
62608				1 or 2	30-28	
63036				1 or 2	30-28	
62609				1 or 2	27-25	
62610				1	24-22	

(a) Quantity indicates the number of magnet wires that can be terminated at the same time in one terminal. (When double wire terminations are permitted, they shall be the same diameter.)

(b) See Figure 9 for "F" crimp wire barrel requirements.

Figure 8

Part Numbers

Part No	Lead Wire		Strip Length ±1/64	Wire Barrel Crimp	
	Qty	Size		Width	Height ±.002
62607	1	26	.115	.055	.028
	1	24			.028
	1	22			.033
62039	1	26	.115	.055	.028
	1	24			.028
	1	22			.033
62608	1	26	.115	.055	.033
	1	24			.033
	1	22			.038
63036	1	26	.115	.055	.033
	1	24			.033
	1	22			.038
62609	1	26	.115	.055	.033
	1	24			.033
	1	22			.038
62610	1	26	.115	.055	.033
	1	24			.033
	1	22			.038

(a) Reasonable care shall be taken not to nick, scrape or cut any strands or the solid wire during the stripping operation.
(b) Wire barrel flash shall not exceed .005.
(c) Wire barrel seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.
(d) Rear bellmouth length shall be .010-.030.
(e) Front bellmouth length shall not exceed .020.
(f) End of the wire shall be flush with the front end of the wire barrel or extend .040 maximum after crimping.
(g) Care shall be taken not to allow insulation to be crimped in the wire barrel.
(h) There shall be no twist or roll in crimped portion that will impair usage of the terminal.

Figure 9

"F" Crimp Interface Requirements