

Rev. A3

AMPMODU* Mod.I Interconnection System, **Receptacle Contact**

1. <u>SCOPE</u>

1.1 Content

This specification covers the requirements for application of AMPMODU* Mod.I Receptacle Contacts. These requirements are applicable to hand or automatic machine crimping tools. For specific wire and insulation ranges relative to the products covered in this specification see Figure 5.

1.2 Reference Specification

For applicable performance requirements, see AMP Specification 108-20026.

2. NOMENCLATURE



FIGURE 1



3. CRIMP AND DIMENSIONAL REQUIREMENTS

- 3.1 Wire preparation
 - A. Strip Length

Insulation shall be stripped as indicated in Figure 5.

B. Workmanship

Reasonable care shall be taken not to nick, scrape or cut any strands or the solid wire during the stripping operation

- 3.2 Carrier cutoff tab and burr
 - A. Cutoff tab Cutoff tab shall not exceed .010
 - B. Burr

Burr on cutoff tab shall not exceed .003

3.3 Wire barrel crimp

A. Crimp dimensions and type

Crimp height, width and type shall be as shown in Figure 5.

B. Effective crimp length

Effective crimp length shall be .090 minimum, and is defined as that portion of the barrel, excluding bellmouth, fully formed by the crimping tool.

C. Wire barrel flash

Wire barrel flash shall not exceed .008 as shown in Figure 2.





D. Wire barrel seam

Wire barrel seam shall be completely closed and there shall be no evidence of loose wire strands or wire strands visible in the seam.

E. Bellmouth

Rear bellmouth length shall be .006 min.

F. Conductor location

- 1. End of the wire shall be flush with the front end of the wire barrel or extend .032 maximum after crimping
- 2. Both insulation and conductor shall be visible between the insulation barrel and wire barrel. Care shall be taken not to allow insulation to be crimped in the wire barrel.



3.4 Insulation barrel crimp

- **A.** *Crimp dimensions and type* Crimp width and type shall be as shown in Figure 5.
- **B.** *Workmanship* Reasonable care shall be taken not to cut or break the insulation during the crimping operation.

3.5 Locking lance

Locking lance shall not be deformed.

3.6 Alignment

- A. Straightness
 - 1. The contact, including the cutoff tab and burr shall not be bent below the datum line or more than .020 above the datum line, as shown in Figure 3.



2. The side to side bending of the contact shall not exceed the limits specified in Figure 4.



B. Twist or roll

There shall be no twist or roll in crimped portion that will impair usage of the contact.



PART N° STRIP	WIRE		INSULATION	STRIP	WIRE	WIRE BARREL CRIMP			INSULATION BARREL CRIMP		
FORM	Q.TY	SIZE AWG (SQmm)	DIAMETER	LENGTH	WIDT H	HEIGHT	TYP E	WIDT H	HEIGHT	TYPE	
281423	1	17 (1.0) 18 (0.75) 20 (0.5)	.086 ÷ .110	.132 ÷ .164	.070	$.048 \pm .001 \\ .046 \pm .001 \\ .040 \pm .001$	F	.095	-	F	
280621 280702	1	18 20 22	.073 ÷ .090	.132 ÷ .164	.070	$.046 \pm .001 \\ .040 \pm .001 \\ .037 \pm .001$	F	.100	-	0	
282142	1	22 24 26	.042 ÷ .073	.132 ÷ .164	.055	$.034 \pm .001 \\ .029 \pm .001 \\ .029 \pm .001$	F	.090	-	F	

AUTOMATIC MACHINE: WIRE CRIMP DIMENSIONS

HAND TOOL : WIRE CRIMP DIMENSIONS

PART N° LOOSE	PART N° HAND	WIRE		INSULATION	STRIP	WIRE BARREL CRIMP			INSULATION BARREL CRIMP		
PIECE	TOOL	Q.TY	SIZE AWG	DIAMETER	LENGTH	WIDTH	HEIGHT	TYPE	WIDTH	HEIGHT	TYPE
181299	90274-2	1	18 20 ÷ 22	.073 ÷ .090	.132 ÷ .164	.070	$.042 {\pm .0015} \\ .033 {\pm .0015}$	F	.100	.068 ±.006	0
182198	90274-2	1	18 20 ÷ 22	.073 ÷ .090	.132 ÷ .164	.070	$.042 {\pm} .0015 \\ .033 {\pm} .0015$	F	.100	.068 ±.006	0
182960	90328-1	1	22 24 26	.042 ÷ .073	.132 ÷ .164	.055	$\begin{array}{c} .034 \pm .002 \\ .029 \pm .002 \\ .029 \pm .002 \end{array}$	F	.090	-	0

FIGURE 5