

**1 GENERAL**

**1.1 SCOPE**

This specification details the ratings, physical and electrical characteristics, test and inspection data for Contacts, Electrical, Crimp, for 3401/077 Microminiature Connectors based on type MDMA.

These contacts shall be packed separately from the connectors and may be procured either with the connectors or separately.

This specification shall be read in conjunction with:

- (a) ESCC Generic Specification No. 3401, Connectors, Electrical, Non-Filtered, Circular and Rectangular.
- (b) ESCC Detail Specification No. 3401/077, Connectors, Electrical, Rectangular, Microminiature, Removable Crimp Contacts, based on Type MDMA.

the requirements of which are supplemented herein.

**1.2 TYPE VARIANTS**

The contact type variants are scheduled in Table 1(a).

**1.3 MAXIMUM RATINGS**

The maximum ratings, which shall not be exceeded at any time during use or storage, applicable to the contacts specified herein, are scheduled in Table 1(b).

**1.4 PARAMETER DERATING INFORMATION (FIGURE 1)**

Not applicable.

**1.5 PHYSICAL DIMENSIONS**

The physical dimensions of the contacts specified herein are shown in Figure 2.

**TABLE 1(a) - TYPE VARIANTS**

Characteristics	Variant				Unit
	1	2	3	4	
Type	Male	Female	Male	Female	-
Mating End Size	24	24	24	24	AWG
Crimp Barrel Size	26	26	24	24	AWG
Accept Wire	25, 26, 28	25, 26, 28	24 note 1 25, 26, 28 2 x 28 note 2	24 note 1 25, 26, 28 2 x 28 note 2	AWG
Rated Current for AWG 26 insulated and AWG 25 uninsulated solid wire	2.5	2.5	2.5	2.5	A
Rated Current for AWG 28 insulated wire	1.5	1.5	1.5 / 2 x 1.5 note 2	1.5 / 2 x 1.5 note 2	A

Characteristics		Variant		Unit	
		01, 03	02, 04		
Engagement and Separation - Contact Engagement Force	Maximum Force		1.667	-	N
	Test Pin Diameter	Minimum	0.559	-	mm
		Maximum	0.564	-	mm
Engagement and Separation - Contact Separation Force	Maximum Force		0.137	-	N
	Test Pin Diameter	Minimum	0.582	-	mm
		Maximum	0.587	-	mm
Contact Capability - Pick-Up Weight	Weight		14	-	g
	Test Pin Diameter	Minimum	0.582	-	mm
		Maximum	0.587	-	mm
	Minimum Insertion Depth		1.5	-	mm
Contact Capability - Drop Weight	Weight		170	-	g
	Test Pin Diameter	Minimum	0.559	-	mm
		Maximum	0.564	-	mm
	Minimum Insertion Depth		1.5	-	mm
Contact Retention Force (in Insert)		Minimum	22.25 note 3 11.00 note 4	22.25 note 3 11.00 note 4	N
Contact Insertion and Withdrawal Forces		Maximum	10	10	N

**NOTES:**

1. Accept wire AWG 24: Finished wire Max Ø 0,97 mm for shell size 51 (3 rows)
2. Not applicable for shell size 51 (3 rows)
3. Applicable for shells sizes 9 to 37 (2 rows)
4. Applicable for shells size 51 (3 rows)

**TABLE 1(b) – MAXIMUM RATINGS**

No.	Characteristics	Symbol	Maximum Ratings	Unit
1	Rated Current	I <sub>R</sub>	See Table 1(a)	A
2	Operating Temperature Range	T <sub>op</sub>	-55 to +125	°C
3	Storage Temperature Range	T <sub>stg</sub>	-65 to +125	°C

**FIGURE 1 – PARAMETER DERATING INFORMATION**

Not applicable.