

ENGINEERING DATA

The following information is provided for the convenience of engineers and technical writers as well as individuals who require additional information about **Kern** products. All tests reported herein were conducted in accordance with accepted practices by independent laboratories, or by other independent entities qualified in the types of testing involved.

FUNCTIONAL TESTING:

In order to firmly establish the EMI / RFI characteristics of D-subminiature connector backshells manufactured by **Kern Engineering and Manufacturing Corp.** of Fullerton, California, a series of quantitative performance tests were conducted on a range of designs to frequencies of 1 GHz. Results of these performance tests show that shielding effectiveness from 60 dB to well in excess of 140 dB can be achieved dependent on design configurations.

MAGNETIC PERMEABILITY TESTING:

Magnetic permeability tests were conducted in accordance with MIL-I-17214 and showed all values below 1.2 mu.

ENVIRONMENTAL TESTING:

Vibration tests were conducted in accordance with MIL-STD-1344A, Method 2005.1, Test Condition IV (monitored to .01 ms). During these tests, no contact interruptions between the shield and backshell occurred, and there was no physical damage.

Shock tests were conducted in accordance with MIL-STD-1344A Method 2004.1, Test condition C. (Monitored to .01 ms). During these tests, no contact interruptions between the shield and backshell occurred and there was no physical damage.

APPLICABLE STANDARDS:

QQ-A-225	Aluminum Alloys	MIL-STD-454	Workmanship
QQ-A-200	Aluminum Alloys	MIL-I-17214	Magnetic Permeability
QQ-A-591	Aluminum Alloys	MIL-STD-1344A	Shock and Vibration
WW-T-700	Aluminum Alloys	MIL-STD-202	Test Methods
QQ-N-281	Monel	MIL-S-7742	Screw Threads
QQ-S-763	CRES 300 Series	MIL-STD-1285	Marking
QQ-S-766	CRES 300 Series	MIL-STD-130	Marking
QQ-P-35	Passivation	MIL-W-8604	Welding
AMS3209	Neoprene	MIL-W-8611	Welding
AMS3304	Silicone Rubber	MIL-B-7883	Brazing
ZZ-R-765	Silicone Rubber	MIL-STD-461	EMC Requirements
MIL-C-85049	Connector Accessories	MIL-STD-462	EMI Measurements

TABLE 2

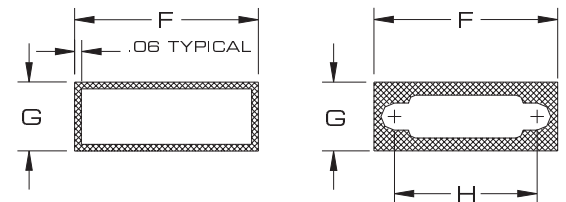
REPLACEMENT GASKET DATA

SHELL SIZE	F ± .015	G ± .015	H ± .015
9	1.362	.634	.984
15	1.690	.634	1.312
25	2.237	.634	1.852
37	2.878	.634	2.500
50	2.784	.745	2.406
104	2.878	.808	2.500

TABLE 11

STANDARD FINISHES

FINISH CODE	DESCRIPTION
B	CADMIUM PLATE, OLIVE DRAB, PER QQ-P-416, TYPE II, CLASS 3.
C	CHEMICAL FILM, (IRRIDITE OR ALODINE) PER MIL-C-5541, TYPE I, GRADE C, CLASS 3.
F	CADMIUM PLATE, BRIGHT DIP, PER QQ-P-416 TYPE I, CLASS 3, OVER ELECTROLESS NICKEL PER MIL-C-26074, CLASS 3 OR 4, GRADE B.
J	ELECTROLESS NICKEL PLATE PER MIL-C-26074, CLASS 3 OR 4, GRADE B.
L	TIN PLATE PER MIL-T-10727 TYPE I.
M	CADMIUM PLATE, GOLD IRRIDITE, PER QQ-P-416, TYPE II, CLASS 3, OVER NICKEL STRIKE OR FLASH PER MIL-C-26074 OR QQ-N-290
N	GOLD PLATE PER MIL-G-45204 TYPE II, CLASS 2.
R	BLACK ANODIZE PER MIL-A-8625, TYPE II, CLASS 2.
W	CADMIUM PLATE, OLIVE DRAB, PER QQ-P-416 TYPE II, CLASS 2, OVER ELECTROLESS NICKEL PER MIL-C-26074, CLASS 3 OR 4, GRADE B. (TO WITHSTAND 500 HR. SALT SPRAY TEST)
Z	CUSTOM FINISHED TO YOUR SPECIFICATION



TERMINATION TOOLS



BAND TERMINATION PLIERS

PART NO. T2624

TERMINATION BANDS

1/8 INCH WIDTH PART NO. 13049

1/4 INCH WIDTH PART NO. 13076