

FEATURES AND SPECIFICATIONS

Features and Benefits

- Sizes 4 to 80 circuits
- Stackable side-to-side and end-to-end (on unbroken edges)
- Easy breakaway to smaller sizes
- Drawn .025" square wire provides 4-sided smooth surface for quality interface

Reference Information

Packaging: Bag
 UL File No.: E29179 (G)
 Mates With: 7859 Shunts, C-Grid Receptacles, SL Crimp and IDT Housings
 CSA File No.: LR19980A
 Designed In: Inches

Electrical

Voltage: 250V
 Current: 3.0A
 Contact Resistance: 15mΩ max.
 Dielectric Withstanding Voltage: 1500V
 Insulation Resistance: 1000 MΩ min.

Mechanical

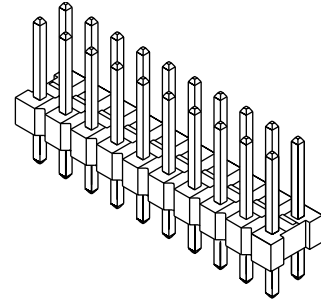
Pin Retention to Header: 17.79N (4 lb)
 Durability: 25 cycles Tin/Lead and 50 cycles Gold

Physical

Housing: High-temperature thermal plastic, UL 94V-0
 Contact: Phosphor Bronze
 Plating: See Table
 Operating Temperature: -40 to +105°C

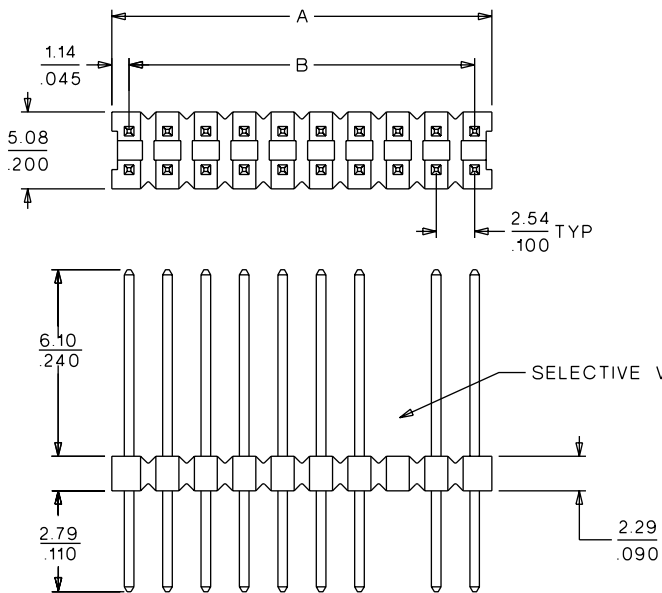
molex® 2.54mm (.100") Pitch C-Grid® Breakaway Header

70280 Dual Row, Vertical High-Temperature

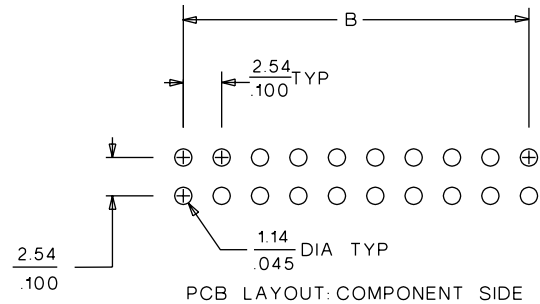


2.54mm (.100") Pitch

CATALOG DRAWING (FOR REFERENCE ONLY)



Not For Use With Molex C-Grid III™ Components



ORDERING INFORMATION AND DIMENSIONS

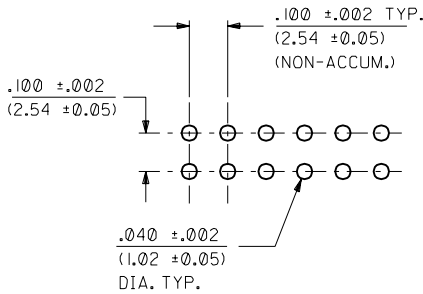
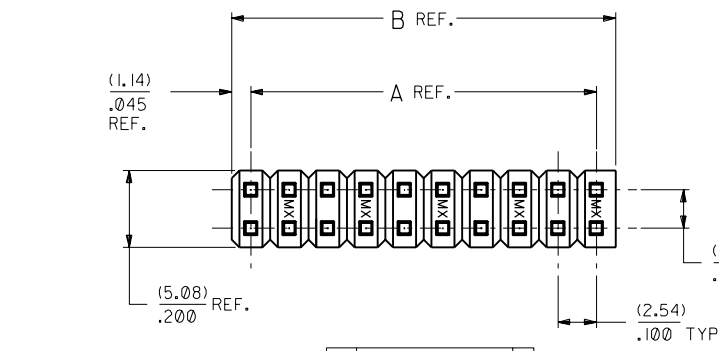
Circuits	Dimension	
	A	B
4	4.83 (.190)	2.54 (.100)
6	7.37 (.290)	5.08 (.200)
8	9.91 (.390)	7.62 (.300)
10	12.45 (.490)	10.16 (.400)
12	14.99 (.590)	12.70 (.500)
14	17.53 (.690)	15.24 (.600)
16	20.07 (.790)	17.78 (.700)
18	22.61 (.890)	20.32 (.800)
20	25.15 (.990)	22.86 (.900)
22	27.69 (1.090)	25.40 (1.000)
24	30.23 (1.190)	27.94 (1.100)
26	32.77 (1.290)	30.48 (1.200)
28	35.31 (1.390)	33.02 (1.300)

Circuits	Dimension	
	A	B
30	37.85 (1.490)	35.56 (1.400)
32	40.39 (1.590)	38.10 (1.500)
34	42.93 (1.690)	40.64 (1.600)
36	45.47 (1.790)	43.18 (1.700)
38	48.01 (1.890)	45.72 (1.800)
40	50.55 (1.990)	48.26 (1.900)
42	53.09 (2.090)	50.80 (2.000)
44	55.63 (2.190)	53.34 (2.100)
46	58.17 (2.290)	55.88 (2.200)
48	60.71 (2.390)	58.42 (2.300)
50	63.25 (2.490)	60.96 (2.400)
52	65.79 (2.590)	63.50 (2.500)
54	68.33 (2.690)	66.04 (2.600)

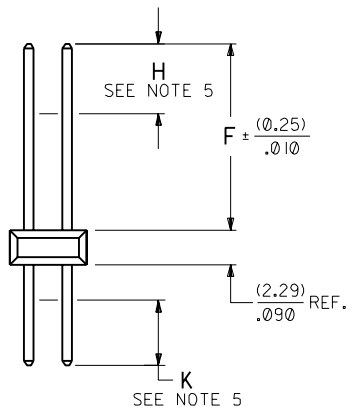
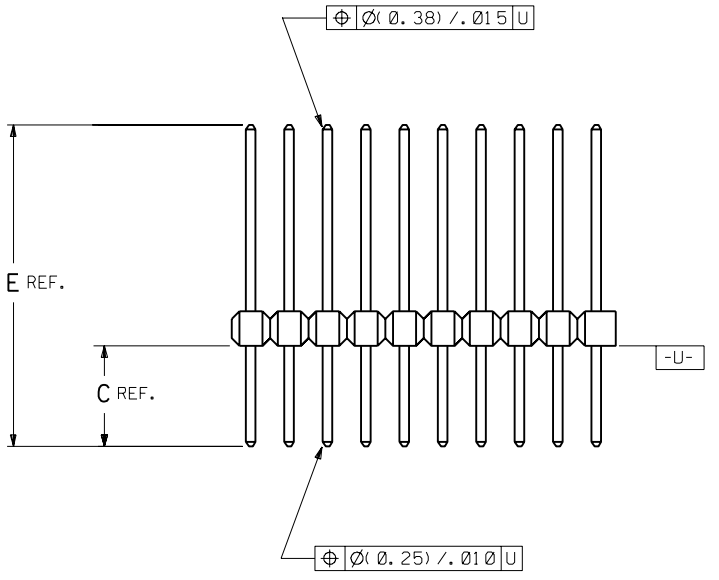
Circuits	Dimension	
	A	B
56	70.87 (2.790)	68.58 (2.700)
58	73.41 (2.890)	71.12 (2.800)
60	75.95 (2.990)	73.66 (2.900)
62	78.49 (3.090)	76.20 (3.000)
64	81.03 (3.190)	78.74 (3.100)
66	83.57 (3.290)	81.28 (3.200)
68	86.11 (3.390)	83.82 (3.300)
70	88.65 (3.490)	86.36 (3.400)
72	91.19 (3.590)	88.90 (3.500)
74	93.73 (3.690)	91.44 (3.600)
76	96.27 (3.790)	93.98 (3.700)
78	98.81 (3.890)	96.52 (3.800)
80	101.35 (3.990)	99.06 (3.900)

Plating Option	Order No.
15μ" min. select Gold	• 10-89-7XX2
30μ" min. select Gold	• 10-89-7XX0
150μ" Tin/Lead, Nickel overall	• 10-89-7XX1
Replace XX with no. of circuits, 04-80 (even only), for 2-circuit, see 70343	

• US Standard Product, available through Molex franchised distributors



RECOMMENDED P.C. BOARD HOLE LAYOUT



CKT. SIZE	DIM. A REF.		DIM. B REF.	
	(MM)	INCH	(MM)	INCH
4	(2.54)	.100	(4.83)	.190
6	(5.08)	.200	(7.37)	.290
8	(7.62)	.300	(9.91)	.390
10	(10.16)	.400	(12.45)	.490
12	(12.70)	.500	(14.99)	.590
14	(15.24)	.600	(17.53)	.690
16	(17.78)	.700	(20.07)	.790
18	(20.32)	.800	(22.61)	.890
20	(22.86)	.900	(25.15)	.990
22	(25.40)	1.000	(27.69)	1.090
24	(27.94)	1.100	(30.23)	1.190
26	(30.48)	1.200	(32.77)	1.290
28	(33.02)	1.300	(35.31)	1.390
30	(35.56)	1.400	(37.85)	1.490
32	(38.10)	1.500	(40.39)	1.590
34	(40.64)	1.600	(42.93)	1.690
36	(43.18)	1.700	(45.47)	1.790
38	(45.72)	1.800	(48.01)	1.890
40	(48.26)	1.900	(50.55)	1.990
42	(50.80)	2.000	(53.09)	2.090
44	(53.34)	2.100	(55.63)	2.190
46	(55.88)	2.200	(58.17)	2.290
48	(58.42)	2.300	(60.71)	2.390
50	(60.96)	2.400	(63.25)	2.490
52	(63.50)	2.500	(65.79)	2.590
54	(66.04)	2.600	(68.33)	2.690
56	(68.58)	2.700	(70.87)	2.790
58	(71.12)	2.800	(73.41)	2.890
60	(73.66)	2.900	(75.95)	2.990
62	(76.20)	3.000	(78.49)	3.090
64	(78.74)	3.100	(81.03)	3.190
66	(81.28)	3.200	(83.57)	3.290
68	(83.82)	3.300	(86.11)	3.390
70	(86.36)	3.400	(88.65)	3.490
72	(88.90)	3.500	(91.19)	3.590
74	(91.44)	3.600	(93.73)	3.690
76	(93.98)	3.700	(96.27)	3.790
78	(96.52)	3.800	(98.81)	3.890
80	(99.06)	3.900	(101.35)	3.990

NOTES:

- PIN PUSHOUT FORCE: 4 LBS. MIN. (IN EITHER DIRECTION)
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE IS SHOWN.
- PINS MUST MEET SOLDERABILITY SPEC NO. 152; EXCEPT VOIDS PERMISSIBLE AT BANDOLIER PIN FAYING SURFACE. (APPROX .025 LNG X .006 WD REF.) - 2 LOCATIONS.
- WAFER TO BE FLAT WITHIN (0.03 MM/CM) .003 IN./IN.
- MEASURE POINT FOR PLATING THICKNESS.
- FOR ASSEMBLIES WITH VOIDED PINS, REFER TO DRAWING NO. SDA-70280-5001-9999.
- PACKAGING INFORMATION: (UNLESS OTHERWISE NOTED IN TABLES) PER PACKAGING DRAWING NO. PK-70873-0353 BULK PACKAGED IN BAGS

FINISH: (PER E.S. 88)

- (164) .000150 MIN. TIN/LEAD OVER .000050 MIN. NICKEL PLATE.
- (571) .000015 MIN. GOLD PLATE IN SELECTED AREA, .000075 MIN. TIN/LEAD IN SELECTED AREA, OVER .000050 MIN. NICKEL OVER-ALL.
- (574) .000030 MIN. GOLD PLATE IN SELECTED AREA, .000075 MIN. TIN/LEAD IN SELECTED AREA, OVER .000050 MIN. NICKEL OVER-ALL.

MATERIAL:

PIN: PHOSPHOR BRONZE ALLOY 510
 WAFER: 30% G.F. L C P, 94V-0; COLOR: BLACK

CI	CORRECT CONVERSION PER UDT2002-0438 ACHAMMER 09/13/01
C	ADDED SHEET 3 PER ECR NO U6 1282 11-01-99 RSF
B	ADDED -0121/-0200 PER ECR NO U6 1282 04-12-96 BJS
A	RELEASED PER ECR # U30561 04-19-93 REED

3	C
2	B
1	CI

REVISION ONLY ON CAD SYSTEM

TITLE: SALES ASSEMBLY - HIGH TEMP. DUAL ROW WAFER W/BREAK-OFF OPTION .025 SQ. PINS ON .100 GRID

MOLEX INCORPORATED U.S.A. SHEET NO. 1 OF 3 DATE 04/19/93

PART NO. SDA-70280-0001-4000

DRWG. BY: SMR CHK'D BY: SMR SCALE: 4:1

FILE NAME: 570280X1

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.

J	I3		I2		I1		I0		9		8		7		6		70280		4		3		2		1	
	ENGINEERING NUMBER A-70280-	RELEASE FOR MANUFACTURE							C REF.		E REF.		F ±(0.25) .010		PLATE PER E.S. (88)	CONNECTOR END PLATING		P.C. BOARD END PLATING						FOR PACKAGING INFORMATION, SEE NOTE 7, SHEET J (UNLESS OTHERWISE SPECIFIED BELOW)		
			TYPE	H MEAS.	TYPE	K MEAS.	TYPE	H MEAS.	TYPE	K MEAS.	TYPE	H MEAS.	TYPE	K MEAS.		TYPE	K MEAS.	TYPE	K MEAS.							
	-0001/-0040	R.F.M.							(2.72) .107	(11.10) .437	(6.10) .240			164	TIN/LEAD	(2.54) .100			TIN/LEAD	(1.27) .050						
	-0041/-0080	R.F.M.						(2.72) .107	(11.10) .437	(6.10) .240			571	GOLD	(2.54) .100			TIN/LEAD	(1.27) .050							
I	-0081/-0120	R.F.M.						(2.72) .107	(11.10) .437	(6.10) .240			574	GOLD	(2.54) .100			TIN/LEAD	(1.27) .050							
	-0121/-0160	R.F.M.						(2.79) .110	(13.21) .520	(8.13) .320			164	TIN/LEAD	(4.57) .180			TIN/LEAD	(1.27) .050							
	-0161/-0200	R.F.M.						(2.79) .110	(13.21) .520	(8.13) .320			571	GOLD	(4.57) .180			TIN/LEAD	(1.27) .050							
H	-0201/-0240	R.F.M.						(2.79) .110	(13.21) .520	(8.13) .320			574	GOLD	(4.57) .180			TIN/LEAD	(1.27) .050							
	-0241/-0280	R.F.M.						(3.94) .155	(12.32) .485	(6.10) .240			574	GOLD	(2.54) .100			TIN/LEAD	(1.27) .050							

CKTS	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	EDP NUMBER	ENG NUMBER	CKTS	
	N.A.	AX-70280-0001	N.A.	AX-70280-0041	N.A.	AX-70280-0081	N.A.	AX-70280-0121	N.A.	AX-70280-0161	N.A.	AX-70280-0201	N.A.	AX-70280-0241												
G	04	10-89-7041	A-70280-0002	10-89-7042	A-70280-0042	10-89-7043	A-70280-0082	10-89-7044	A-70280-0122	10-89-7045	A-70280-0162	10-89-7046	A-70280-0202	10-89-7047	A-70280-0242	04										
	06	10-89-7061	A-70280-0003	10-89-7062	A-70280-0043	10-89-7063	A-70280-0083	10-89-7064	A-70280-0123	10-89-7065	A-70280-0163	10-89-7066	A-70280-0203	10-89-7067	A-70280-0243	06										
	08	10-89-7081	A-70280-0004	10-89-7082	A-70280-0044	10-89-7083	A-70280-0084	10-89-7084	A-70280-0124	10-89-7085	A-70280-0164	10-89-7086	A-70280-0204	10-89-7087	A-70280-0244	08										
	10	10-89-7101	A-70280-0005	10-89-7102	A-70280-0045	10-89-7103	A-70280-0085	10-89-7104	A-70280-0125	10-89-7105	A-70280-0165	10-89-7106	A-70280-0205	10-89-7107	A-70280-0245	10										
	12	10-89-7121	A-70280-0006	10-89-7122	A-70280-0046	10-89-7123	A-70280-0086	10-89-7124	A-70280-0126	10-89-7125	A-70280-0166	10-89-7126	A-70280-0206	10-89-7127	A-70280-0246	12										
	14	10-89-7141	A-70280-0007	10-89-7142	A-70280-0047	10-89-7143	A-70280-0087	10-89-7144	A-70280-0127	10-89-7145	A-70280-0167	10-89-7146	A-70280-0207	10-89-7147	A-70280-0247	14										
	16	10-89-7161	A-70280-0008	10-89-7162	A-70280-0048	10-89-7163	A-70280-0088	10-89-7164	A-70280-0128	10-89-7165	A-70280-0168	10-89-7166	A-70280-0208	10-89-7167	A-70280-0248	16										
	18	10-89-7181	A-70280-0009	10-89-7182	A-70280-0049	10-89-7183	A-70280-0089	10-89-7184	A-70280-0129	10-89-7185	A-70280-0169	10-89-7186	A-70280-0209	10-89-7187	A-70280-0249	18										
F	20	10-89-7201	A-70280-0010	10-89-7202	A-70280-0050	10-89-7203	A-70280-0090	10-89-7204	A-70280-0130	10-89-7205	A-70280-0170	10-89-7206	A-70280-0210	10-89-7207	A-70280-0250	20										
	22	10-89-7221	A-70280-0011	10-89-7222	A-70280-0051	10-89-7223	A-70280-0091	10-89-7224	A-70280-0131	10-89-7225	A-70280-0171	10-89-7226	A-70280-0211	10-89-7227	A-70280-0251	22										
	24	10-89-7241	A-70280-0012	10-89-7242	A-70280-0052	10-89-7243	A-70280-0092	10-89-7244	A-70280-0132	10-89-7245	A-70280-0172	10-89-7246	A-70280-0212	10-89-7247	A-70280-0252	24										
	26	10-89-7261	A-70280-0013	10-89-7262	A-70280-0053	10-89-7263	A-70280-0093	10-89-7264	A-70280-0133	10-89-7265	A-70280-0173	10-89-7266	A-70280-0213	10-89-7267	A-70280-0253	26										
	28	10-89-7281	A-70280-0014	10-89-7282	A-70280-0054	10-89-7283	A-70280-0094	10-89-7284	A-70280-0134	10-89-7285	A-70280-0174	10-89-7286	A-70280-0214	10-89-7287	A-70280-0254	28										
	30	10-89-7301	A-70280-0015	10-89-7302	A-70280-0055	10-89-7303	A-70280-0095	10-89-7304	A-70280-0135	10-89-7305	A-70280-0175	10-89-7306	A-70280-0215	10-89-7307	A-70280-0255	30										
	32	10-89-7321	A-70280-0016	10-89-7322	A-70280-0056	10-89-7323	A-70280-0096	10-89-7324	A-70280-0136	10-89-7325	A-70280-0176	10-89-7326	A-70280-0216	10-89-7327	A-70280-0256	32										
	34	10-89-7341	A-70280-0017	10-89-7342	A-70280-0057	10-89-7343	A-70280-0097	10-89-7344	A-70280-0137	10-89-7345	A-70280-0177	10-89-7346	A-70280-0217	10-89-7347	A-70280-0257	34										
E	36	10-89-7361	A-70280-0018	10-89-7362	A-70280-0058	10-89-7363	A-70280-0098	10-89-7364	A-70280-0138	10-89-7365	A-70280-0178	10-89-7366	A-70280-0218	10-89-7367	A-70280-0258	36										
	38	10-89-7381	A-70280-0019	10-89-7382	A-70280-0059	10-89-7383	A-70280-0099	10-89-7384	A-70280-0139	10-89-7385	A-70280-0179	10-89-7386	A-70280-0219	10-89-7387	A-70280-0259	38										
	40	10-89-7401	A-70280-0020	10-89-7402	A-70280-0060	10-89-7403	A-70280-0100	10-89-7404	A-70280-0140	10-89-7405	A-70280-0180	10-89-7406	A-70280-0220	10-89-7407	A-70280-0260	40										
	42	10-89-7421	A-70280-0021	10-89-7422	A-70280-0061	10-89-7423	A-70280-0101	10-89-7424	A-70280-0141	10-89-7425	A-70280-0181	10-89-7426	A-70280-0221	10-89-7427	A-70280-0261	42										
	44	10-89-7441	A-70280-0022	10-89-7442	A-70280-0062	10-89-7443	A-70280-0102	10-89-7444	A-70280-0142	10-89-7445	A-70280-0182	10-89-7446	A-70280-0222	10-89-7447	A-70280-0262	44										
	46	10-89-7461	A-70280-0023	10-89-7462	A-70280-0063	10-89-7463	A-70280-0103	10-89-7464	A-70280-0143	10-89-7465	A-70280-0183	10-89-7466	A-70280-0223	10-89-7467	A-70280-0263	46										
	48	10-89-7481	A-70280-0024	10-89-7482	A-70280-0064	10-89-7483	A-70280-0104	10-89-7484	A-70280-0144	10-89-7485	A-70280-0184	10-89-7486	A-70280-0224	10-89-7487	A-70280-0264	48										
D	50	10-89-7501	A-70280-0025	10-89-7502	A-70280-0065	10-89-7503	A-70280-0105	10-89-7504	A-70280-0145	10-89-7505	A-70280-0185	10-89-7506	A-70280-0225	10-89-7507	A-70280-0265	50										
	52	10-89-7521	A-70280-0026	10-89-7522	A-70280-0066	10-89-7523	A-70280-0106	10-89-7524	A-70280-0146	10-89-7525	A-70280-0186	10-89-7526	A-70280-0226	10-89-7527	A-70280-0266	52										
	54	10-89-7541	A-70280-0027	10-89-7542	A-70280-0067	10-89-7543	A-70280-0107	10-89-7544	A-70280-0147	10-89-7545	A-70280-0187	10-89-7546	A-70280-0227	10-89-7547	A-70280-0267	54										
	56	10-89-7561	A-70280-0028	10-89-7562	A-70280-0068	10-89-7563	A-70280-0108	10-89-7564	A-70280-0148	10-89-7565	A-70280-0188	10-89-7566	A-70280-0228	10-89-7567	A-70280-0268	56										
	58	10-89-7581	A-70280-0029	10-89-7582	A-70280-0069	10-89-7583	A-70280-0109	10-89-7584	A-70280-0149	10-89-7585	A-70280-0189	10-89-7586	A-70280-0229	10-89-7587	A-70280-0269	58										
	60	10-89-7601	A-70280-0030	10-89-7602	A-70280-0070	10-89-7603	A-70280-0110	10-89-7604	A-70280-0150	10-89-7605	A-70280-0190	10-89-7606	A-70280-0230	10-89-7607	A-70280-0270	60										
	62	10-89-7621	A-70280-0031	10-89-7622	A-70280-0071	10-89-7623	A-70280-0111	10-89-7624	A-70280-0151	10-89-7625	A-70280-0191	10-89-7626	A-70280-0231	10-89-7627	A-70280-0271	62										
	64	10-89-7641	A-70280-0032	10-89-7642	A-70280-0072	10-89-7643	A-70280-0112	10-89-7644	A-70280-0152	10-89-7645	A-70280-0192	10-89-7646	A-70280-0232	10-89-7647	A-70280-0272	64										
C	66	10-89-7661	A-70280-0033	10-89-7662	A-70280-0073	10-89-7663	A-70280-0113	10-89-7664	A-70280-0153	10-89-7665	A-70280-0193	10-89-7666	A-70280-0233	10-89-7667	A-70280-0273	66										