

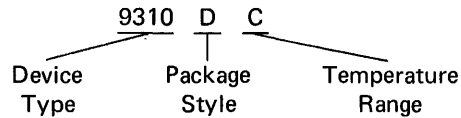
Packaging Information

PACKAGING INFORMATION

Fairchild digital integrated circuits may be ordered using a simplified purchasing code in which the package style is defined as follows:

PACKAGE STYLE

- D = Dual In-Line – Ceramic (Hermetic)
- P = Dual In-Line – Plastic
- F = Flat Package



In order to accommodate varying die sizes (SSI, MSI, etc), numbers of pins (14, 16, 24, etc.), and package outlines, a number of different package forms are required in each of these three categories.

The following lists indicate the specific package dimensions currently used for each device type. The detailed outline corresponding to each package code is shown at the end of this section.

DEVICE	MILITARY (M) -55° to +125° C		DEVICE	COMMERCIAL (C)/INDUSTRIAL 0° to +70°/75° C		
	CERAMIC DIP (D)	FLATPAK (F)		CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
4100 (see 93400)						
4101 (see 93401)						
4102 (see 93402)						
4103 (see 93403)						
4106 (see 93406)						
5033 (see 93407)						
5400	6A	3I	7400	6A	9A	3I
5401	6A	3I	7401	6A	9A	3I
5402	6A	3I	7402	6A	9A	3I
5403	6A	3I	7403	6A	9A	3I
5404	6A	3I	7404	6A	9A	3I
5405	6A	3I	7405	6A	9A	3I
5406	6A	3I	7406	6A	9A	3I
5407	6A	3I	7407	6A	9A	3I
5408	6A	3I	7408	6A	9A	3I
5409	6A	3I	7409	6A	9A	3I
5410	6A	3I	7410	6A	9A	3I
5411	6A	3I	7411	6A	9A	3I
5412	6A	3I	7412	6A	9A	3I
5413	6A	3I	7413	6A	9A	3I
5416	6A	3I	7416	6A	9A	3I
5417	6A	3I	7417	6A	9A	3I
5420	6A	3I	7420	6A	9A	3I
5423	6B	4L	7423	6B	9B	4L
5425	6A	3I	7425	6A	9A	3I
5426	6A		7426	6A	9A	3I
5427	6A	3I	7427	6A	9A	3I
5430	6A	3I	7430	6A	9A	3I
5432	6A	3I	7432	6A	9A	3I
5437	6A	3I	7437	6A	9A	3I
5438	6A	3I	7438	6A	9A	3I
5439	6A	3I	7439	6A	9A	3I
5440	6A	3I	7440	6A	9A	3I
			7441	6B	9B	4L
5442	6B	4L	7442	6B	9B	4L
5443	6B	4L	7443	6B	9B	4L
5444	6B	4L	7444	6B	9B	4L

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55° to +125° C		DEVICE	COMMERCIAL (C)/INDUSTRIAL 0° to +70°/75° C		
	CERAMIC DIP (D)	FLATPAK (F)		CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
5445	7B	4L	7445	7B	9B	4L
5446	7B	4L	7446	7B	9B	4L
5447	7B	4L	7447	7B	9B	4L
5448	7B	4L	7448	7B	9B	4L
5449		3I	7449			3I
5450	6A	3I	7450	6A	9A	3I
5451	6A	3I	7451	6A	9A	3I
5453	6A	3I	7453	6A	9A	3I
5454	6A	3I	7454	6A	9A	3I
5460	6A	3I	7460	6A	9A	3I
5470	6A	3I	7470	6A	9A	3I
5472	6A	3I	7472	6A	9A	3I
5473	6A	3I	7473	6A	9A	3I
5474	6A	3I	7474	6A	9A	3I
5475	6B	4L	7475	6B	9B	4L
5476	6B	4L	7476	6B	9B	4L
5477		3I	7477			3I
5480	6A	3I	7480	6A	9A	3I
5482	6A	3I	7482	6A	9A	3I
5483	6B	4L	7483	6B	9B	4L
5486	6A	3I	7486	6A	9A	3I
5490	6A	3I	7490	6A	9A	3I
5491	6A	3I	7491	6A	9A	3I
5492	6A	3I	7492	6A	9A	3I
5493	6A	3I	7493	6A	9A	3I
5494	6B	4L	7494	6B	9B	4L
5495	6A	3B	7495	6A	9A	3B
5496	7B	4L	7496	7B	9B	4L
54104	6A	3I	74104	6A	9A	3I
54105	6A	3I	74105	6A	9A	3I
54107	6A		74107	6A	9A	
54121	6A	3I	74121	6A	9A	3I
			74141	6B	9B	
54145	7B	4L	74145	7B	9B	4L
54150	6N	4M	74150	6N		4M
54151	7B	4L	74151	7B	9B	4L
54152	7A	3B	74152	7A	9A	3B
54153	7B	4L	74153	7B	9B	4L
54164	7A	3B	74164	7A	9A	3B
54165	7B	4L	74165	7B	9B	4L
54180	7A	3B	74180	7A	9A	3B
54181	6N	4M	74181	6N		4M
54182	7B	4L	74182	7B	9B	4L
54190	7B	4L	74190	7B	9B	4L
54191	7B	4L	74191	7B	9B	4L
54192	7B	4L	74192	7B	9B	4L
54193	7B	4L	74193	7B	9B	4L
54196	7A	3B	74196	7A	9A	3B
54197	7A	3B	74197	7A	9A	3B
54198	6N	4M	74198	6N		4M
54H00	6A	3I	74H00	6A	9A	3I

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55° to +125° C		DEVICE	COMMERCIAL (C)/INDUSTRIAL 0° to +70°/75° C		
	CERAMIC DIP (D)	FLATPAK (F)		CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
54H01	6A	3I	74H01	6A	9A	3I
54H04	6A	3I	74H04	6A	9A	3I
54H05	6A	3I	74H05	6A	9A	3I
54H08	6A	3I	74H08	6A	9A	3I
54H10	6A	3I	74H10	6A	9A	3I
54H11	6A	3I	74H11	6A	9A	3I
54H20	6A	3I	74H20	6A	9A	3I
54H21	6A	3I	74H21	6A	9A	3I
54H22	6A	3I	74H22	6A	9A	3I
54H30	6A	3I	74H30	6A	9A	3I
54H40	6A	3I	74H40	6A	9A	3I
54H50	6A	3I	74H50	6A	9A	3I
54H51	6A	3I	74H51	6A	9A	3I
54H52	6A	3I	74H52	6A	9A	3I
54H53	6A	3I	74H53	6A	9A	3I
54H54	6A	3I	74H54	6A	9A	3I
54H55	6A	3I	74H55	6A	9A	3I
54H60	6A	3I	74H60	6A	9A	3I
54H61	6A	3I	74H61	6A	9A	3I
54H62	6A	3I	74H62	6A	9A	3I
54H71	6A	3I	74H71	6A	9A	3I
54H72	6A	3I	74H72	6A	9A	3I
54H73	6A	3I	74H73	6A	9A	3I
54H74	6A	3I	74H74	6A	9A	3I
54H76	6B	4L	74H76	6B	9B	4L
54H78	6A	3I	74H78	6A	9A	3I
54H87	7A	3B	74H87	7A		3B
54H101	6A	3I	74H101	6A	9A	3I
54H102	6A	3I	74H102	6A	9A	3I
54H103	6A	3I	74H103	6A	9A	3I
54H106	6B	4L	74H106	6B	9B	4L
54H108	6A	3I	74H108	6A	9A	3I
54H183	7A	3B	74H183	7A		3B
54S00	6A	3I	74S00	6A		3I
54S03	6A	3I	74S03	6A		3I
54S04	6A	3I	74S04	6A		3I
54S05	6A	3I	74S05	6A		3I
54S20	6A	3I	74S20	6A		3I
54S22	6A	3I	74S22	6A		3I
54S40	6A	3I	74S40	6A		3I
54S64	6A	3I	74S64	6A		3I
54S65	6A	3I	74S65	6A		3I
54S74	6A	3I	74S74	6A		3I
54S112	6B	4L	74S112	6B		4L
54S113	6A	3I	74S113	6A		3I
54S114	6A	3I	74S114	6A		3I
54S140	6A	3I	74S140	6A		3I
55107	6A		75107	6A	9A	
55108	6A		75108	6A	9A	
55109	6A		75109	6A	9A	
55110			75110	6A	9A	
			7545C	6A		

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55°C to +125°C		COMMERCIAL (C)/INDUSTRIAL 0°C to +70°C/75°C		
	CERAMIC DIP (D)	FLATPAK (F)	CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
9000	6A	3I	6A		3I
9001	6A	3I	6A		3I
9002	6A	3I	6A		3I
9003	6A	3I	6A		3I
9004	6A	3I	6A		3I
9005	6A	3I	6A		3I
9006	6A	3I	6A		3I
9007	6A	3I	6A		3I
9008	6A	3I	6A		3I
9009	6A	3I	6A		3I
9012	6A	3I	6A		3I
9014	6B	4L	6B		4L
9015	6B	4L	6B		4L
9016	6A	3I	6A		3I
9017	6A	3I	6A		3I
9020	7B	4L	7B		4L
9022	7B	4L	7B		4L
9024	7B	4L	7B		4L
9033 (see 93433)					
9034 (see 93434)					
9035 (see 93435)					
9H00	6A	3I	6A	9A	3I
9H01	6A	3I	6A	9A	3I
9H04	6A	3I	6A	9A	3I
9H05	6A	3I	6A	9A	3I
9H08	6A	3I	6A	9A	3I
9H10	6A	3I	6A	9A	3I
9H11	6A	3I	6A	9A	3I
9H20	6A	3I	6A	9A	3I
9H21	6A	3I	6A	9A	3I
9H22	6A	3I	6A	9A	3I
9H30	6A	3I	6A	9A	3I
9H40	6A	3I	6A	9A	3I
9H50	6A	3I	6A	9A	3I
9H51	6A	3I	6A	9A	3I
9H52	6A	3I	6A	9A	3I
9H53	6A	3I	6A	9A	3I
9H54	6A	3I	6A	9A	3I
9H55	6A	3I	6A	9A	3I
9H60	6A	3I	6A	9A	3I
9H61	6A	3I	6A	9A	3I
9H62	6A	3I	6A	9A	3I
9H71	6A	3I	6A	9A	3I
9H72	6A	3I	6A	9A	3I
9H73	6A	3I	6A	9A	3I
9H74	6A	3I	6A	9A	3I
9H76	6B	4L	6B	9B	4L
9H78	6A	3I	6A	9A	3I
9H101	6A	3I	6A	9A	3I
9H102	6A	3I	6A	9A	3I
9H103	6A	3I	6A	9A	3I

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55°C to +125°C		COMMERCIAL (C)/INDUSTRIAL 0°C to +70°C/75°C		
	CERAMIC DIP (D)	FLATPAK (F)	CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
9H106	6B	4L	6B	9B	4L
9H108	6A	3I	6A	9A	3I
9L00	6A	3I	6A		3I
9L04	6A	3I	6A		3I
9L24	7B	4L	7B		4L
9L54	6A	3I	6A		3I
9L86	6A	3I	6A		3I
9N00	6A	3I	6A	9A	3I
9N01	6A	3I	6A	9A	3I
9N02	6A	3I	6A	9A	3I
9N03	6A	3I	6A	9A	3I
9N04	6A	3I	6A	9A	3I
9N05	6A	3I	6A	9A	3I
9N06	6A	3I	6A	9A	3I
9N07	6A	3I	6A	9A	3I
9N08	6A	3I	6A	9A	3I
9N09	6A	3I	6A	9A	3I
9N10	6A	3I	6A	9A	3I
9N11	6A	3I	6A	9A	3I
9N12	6A	3I	6A	9A	3I
9N13	6A	3I	6A	9A	3I
9N16	6A	3I	6A	9A	3I
9N17	6A	3I	6A	9A	3I
9N20	6A	3I	6A	9A	3I
9N23	6B	4L	6B	9B	4L
9N25	6A	3I	6A	9A	3I
9N26	6A	3I	6A	9A	3I
9N27	6A	3I	6A	9A	3I
9N30	6A	3I	6A	9A	3I
9N32	6A	3I	6A	9A	3I
9N37	6A	3I	6A	9A	3I
9N38	6A	3I	6A	9A	3I
9N39	6A	3I	6A	9A	3I
9N40	6A	3I	6A	9A	3I
9N50	6A	3I	6A	9A	3I
9N51	6A	3I	6A	9A	3I
9N53	6A	3I	6A	9A	3I
9N54	6A	3I	6A	9A	3I
9N60	6A	3I	6A	9A	3I
9N70	6A	3I	6A	9A	3I
9N72	6A	3I	6A	9A	3I
9N73	6A	3I	6A	9A	3I
9N74	6A	3I	6A	9A	3I
9N76	6B	4L	6B	9B	4L
9N86	6A	3I	6A	9A	3I
9N107	6A	3I	6A	9A	3I
9S00	6A	3I	6A		3I
9S03	6A	3I	6A		3I
9S04	6A	3I	6A		3I
9S04A	6A	3I	6A		3I
9S05	6A	3I	6A		3I
9S05A	6A	3I	6A		3I

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55°C to +125°C		COMMERCIAL (C)/INDUSTRIAL 0°C to +70°C/75°C		
	CERAMIC DIP (D)	FLATPAK (F)	CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
9S20	6A	3I	6A		3I
9S22	6A	3I	6A		3I
9S40	6A	3I	6A		3I
9S64	6A	3I	6A		3I
9S65	6A	3I	6A		3I
9S74	6A	3I	6A		3I
9S109	6B	4L	6B		4L
9S112	6B	4L	6B		4L
9S113	6A	3I	6A		3I
9S114	6A	3I	6A		3I
9S140	6A	3I	6A		3I
9300	7B	4L	7B		4L
93H00	7B	4L	7B		4L
9301	7B	4L	7B		4L
9302	7B	4L	7B		4L
9304	6B	4L	6B		4L
9305	7A	3B	7A		3B
9307	6B	4L	6B		4L
9308	6N	4M	6N	9N	4M
9309	6B	4L	6B		4L
9310	7B	4L	7B		4L
9311	6N	4M	6N	9N	4M
9312	7B	4L	7B		4L
9313	7B	4L	7B		4L
9314	7B	4L	7B		4L
9315	6B	4L	6B	9B	4L
9316	7B	4L	7B		4L
9317B	7B	4L	7B		4L
9317C	7B	4L	7B		4L
9318	7B	4L	7B		4L
9321	7B	4L	7B		4L
9322	7B	4L	7B		4L
9324	7B	4L	7B		4L
9328	7B	4L	7B		4L
9334	7B	4L	7B		4L
9338	7B	4L	7B		4L
9340	6N	4M	6N	9N	4M
9341	6N	4M	6N	9N	4M
9342	7B	4L	7B		4L
9344	6N	4M	6N	9N	4M
9345	7B	4L	7B	9B	4L
9348	7B	4L	7B		4L
9350			7A		
9352	6B	4L	6B	9B	4L
9353	6B	4L	6B	9B	4L
9354	6B	4L	6B	9B	4L
9356			7A		
9357A	7B	4L	7B	9B	4L
9357B	7B	4L	7B	9B	4L
9358	7B	4L	7B	9B	4L
9359		3I			3I

PACKAGING INFORMATION

DEVICE	MILITARY (M) -55°C to +125°C		COMMERCIAL (C)/INDUSTRIAL 0°C to +70°C/75°C		
	CERAMIC	FLATPAK (F) DIP (D)	CERAMIC	PLASTIC DIP (D)	FLATPAK (F) DIP (P)
9360	7B	4L	7B	9B	4L
9366	7B	4L	7B	9B	4L
93H72	7B	4L	7B		4L
9375	6B	4L	6B	9B	4L
9377		3I			3I
9380	6A	3I	6A	9A	3I
9382	6A	3I	6A	9A	3I
9383	6B	4L	6B	9B	4L
9386	7A	3B	7A		3B
93H87	7A	3B	7A		3B
9390	6A	3B	6A	9A	3B
9391	6A	3I	6A	9A	3I
9392	6A	3B	6A	9A	3B
9393	6A	3B	6A	9A	3B
9394	6B	4L	6B	9B	4L
9395	6A	3I	6A	9A	3I
9396	7B	4L	7B	9B	4L
93141			6B	9B	
93145	7B	4L	7B	9B	4L
93150	6N	4M	6N	9N	4M
93151	7B	4L	7B	9B	4L
93152	7A	3B	7A	9A	3B
93153	7B	4L	7B	9B	4L
93164	7A	3B	7A	9A	3B
93165	7B	4L	7B	9B	4L
93180	7A	3B	7A	9A	3B
93H183	7A	3B	7A		3B
93190	7B	4L	7B	9B	4L
93191	7B	4L	7B	9B	4L
93196	7A	3B	7A	9A	3B
93197	7A	3B	7A	9A	3B
93198	6N	4M	6N	9N	4M
93400			7B		
93400B			7B		
93401			7B		
93402			6N		
93403			7B		4L
93406			7K		
93407/A			6A		3I
93407/B	6A	3I	6A		3I
93410	7K		7K		
93410A			7K		
93415			7K		
93433/A			6A		3I
93433/B	6A	3I	6A		3I
93434	7B		7B		
93435	7U		7U		
93L00	7B	4L	7B		4L
93L01	7B	4L	7B		4L
93L08	6N	4M	6N		4M
93L09	6B	4L	6B		4L
93L10	7B	4L	7B		4L
93L11	6N	4M	6N		4M
93L12	7B	4L	7B		4L

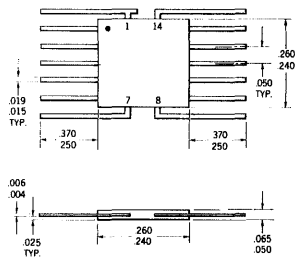
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PACKAGING INFORMATION

DEVICE	MILITARY (M) -55°C to +125°C		COMMERCIAL (C)/INDUSTRIAL 0°C to +70°C/75°C		
	CERAMIC DIP (D)	FLATPAK (F)	CERAMIC DIP (D)	PLASTIC DIP (P)	FLATPAK (F)
93L14	7B	4L	7B		4L
93L16	7B	4L	7B		4L
93L18	7B	4L	7B		4L
93L21	7B	4L	7B		4L
93L22	7B	4L	7B		4L
93L24	7B	4L	7B		4L
93L28	7B	4L	7B		4L
93L40	6N	4M	6N		4M
93S00	7B	4L	7B		4L
93S05	7A	3B	7A		3B
93S10	7B	4L	7B		4L
93S12	7B	4L	7B		4L
93S16	7B	4L	7B		4L
93S41	6N	4M	6N		4M
93S42	7B	4L	7B		4L
93S62	7A	3B	7A		3B
9600	6A	3I	6A	9A	3I
9601	6A	3I	6A	9A	3I
9602	6B	4L	6B		4L
96L02	6B	4L	6B		4L
9603	6A	3I	6A	9A	3I
9614	7B	4L	7B		4L
9615	7B	4L	7B		4L
9616			6A		
9617			6A		
9620	6A	3I	6A		3I
9621	6A	3I	6A		3I
9622	6A	3I	6A		3I
9624	6A	3I	6A		3I
9625	6A	3I	6A		3I
9644	7B		7B		

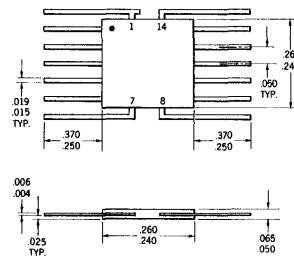
PACKAGE PHYSICAL DIMENSIONS

3B
in accordance with
JEDEC (TO-86) outline
14 Lead MSI Cerpak



NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.26 gram
Lead 1 orientation may be either tab or dot

3I
in accordance with
JEDEC (TO-86) outline
14 Lead Cerpak

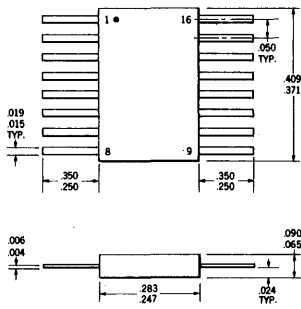


NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.26 gram
Lead 1 orientation may be either tab or dot

PACKAGE PHYSICAL DIMENSIONS

16 Lead Cerpak

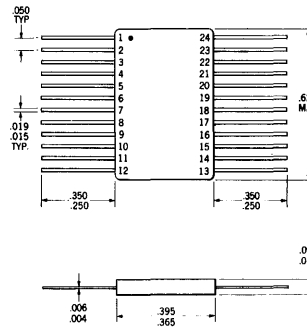
4L



NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.4 gram

24 Lead BeO Cerpak

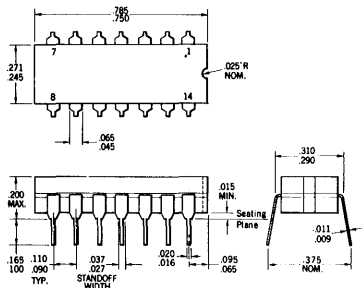
4M



NOTES: All dimensions in inches
Leads are gold-plated kovar
Package weight is 0.8 gram

in accordance with JEDEC (TO-116) outline
14 Lead SSI Dual In-line

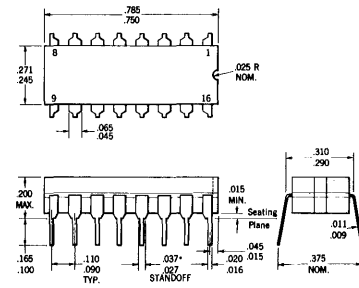
6A



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 2.0 grams

16 Lead SSI Dual In-line

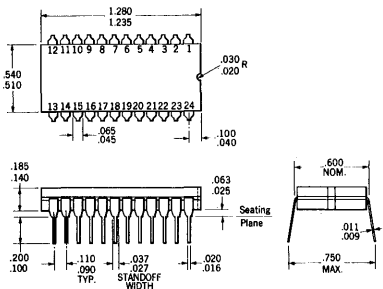
6B



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 2.0 grams
The .0371 / .027 dimension does not apply to the corner leads

24 Lead MSI Dual In-line

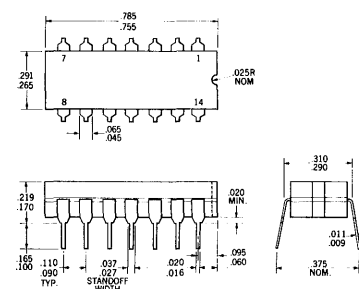
6N



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .600" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Leads are tin-plated kovar
Package weight is 6.6 grams

Similar* to JEDEC (TO-116) outline
14 Lead MSI Dual In-line

7A

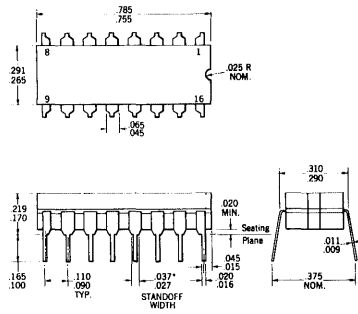


NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board-drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 2.2 grams
*Similar to JEDEC TO-116 except for package width

10

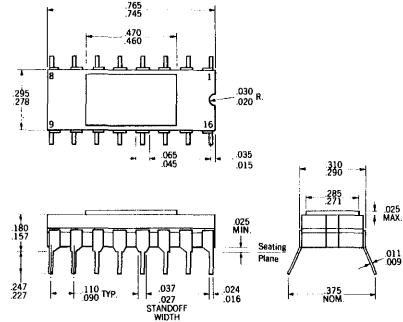
PACKAGE PHYSICAL DIMENSIONS

16 Lead MSI Dual In-line **7B**



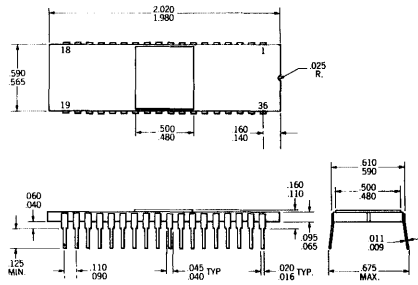
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 2.2 grams
*The .037 dimension does not apply to the corner leads

16 Lead Dual In-line (Metal Cap) **7K**



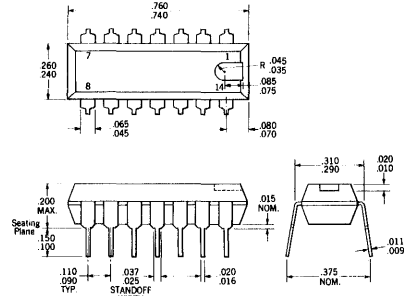
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board drilling dimensions should equal your practice for .020 inch diameter lead
Leads are gold-plated kovar
Low temperature seal
Package weight is 1.3 grams

36 Lead Side Brazed Dual In-line **7U**



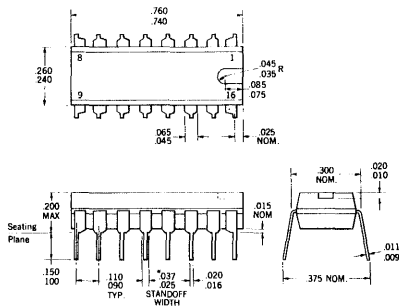
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .600" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Leads are gold-plated kovar
Package weight is 6.2 grams

in accordance with JEDEC (TO-116) outline **9A**
14 Lead Silicone Dual In-line



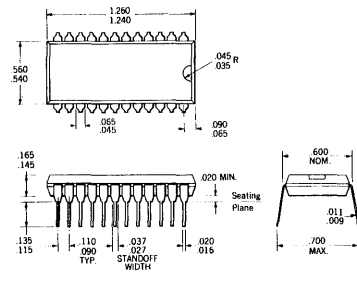
NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 0.9 grams

16 Lead Silicone Dual In-line **9B**



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .300" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Board drilling dimensions should equal your practice for .020 inch diameter lead
Leads are tin-plated kovar
Package weight is 0.9 grams
*The .037/.027 dimension does not apply to the corner leads

24 Lead Plastic MSI Dual In-line **9N**



NOTES: All dimensions in inches
Leads are intended for insertion in hole rows on .600" centers
They are purposely shipped with "positive" misalignment to facilitate insertion
Leads are tin-plated kovar
Package weight is 2.7 grams