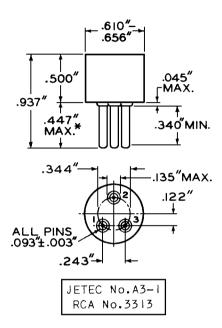


SMALL-SHELL PEEWEE 3-PIN



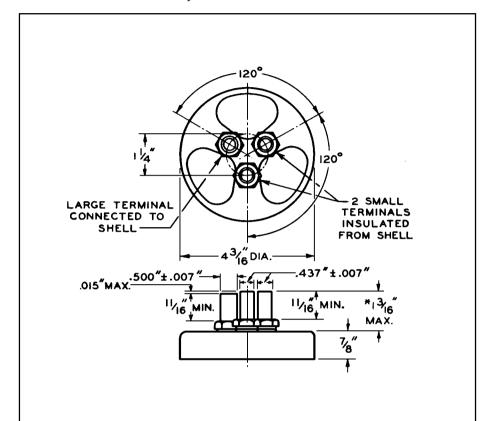
Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA3-1) having thickness of 1/4" and three holes with diameters of 0.1030"- 0.1035" so located on a 0.3440" \pm 0.0005" diameter circle that the distance along the chord between two adjacent hole centers is 0.2340" \pm 0.0005" and the distance along the chord between the remaining pin and the two adjacent pins is 0.3175" \pm 0.0005".

Pin fit in gauge is such that gauge together with supplementary weight totaling 2 pounds will not be lifted when pins are withdrawn.

 $[^]st$ Add 0.020" for solder on finished tube.



3-TERMINAL TYPES

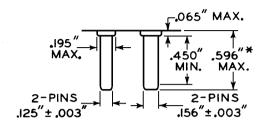


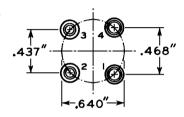
JETEC No.A3-80 RCA No.3232

 st Add 1/8" for solder on finished tube.



"SMALL 4-PIN" PIN DIMENSIONS AND ORIENTATION

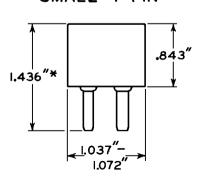




Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA4-I) having thickness of I/4" and four holes, two with diameters of 0.1650" \pm 0.0005" and two with diameters of 0.1340" \pm 0.0005" so located on a 0.6400" \pm 0.0005" diameter circle that the distance between the adjacent 0.1650" diameterpins is 0.4680" \pm 0.0005" and the distance between the adjacent 0.1340" diameter pins is 0.4370" \pm 0.0005".

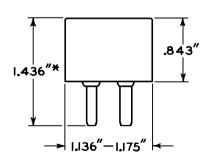
Pin fit in gauge is such that gauge together with supplementary weight totaling 4 pounds will not be lifted when pins are withdrawn.

DWARF-SHELL SMALL 4-PIN



JETEC No.A4-26 RCA No.4107

SMALL-SHELL SMALL 4-PIN

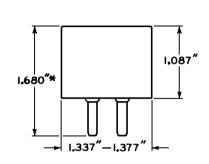


JETEC No.A4-5 RCA No.4108

Add 0.030 " for solder on finished tube.

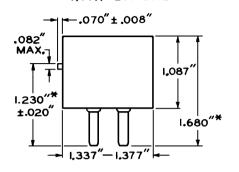






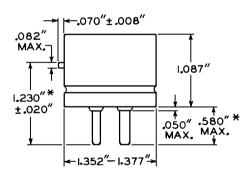
JETEC No.A4-9 RCA No.4106

MEDIUM-SHELL SMALL 4-PIN WITH BAYONET



JETEC No.A4-10 RCA No.4102

MEDIUM-METAL-SHELL SMALL 4-PIN WITH BAYONET



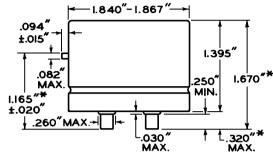
JETEC No.A4-89 RCA No.4102-MI

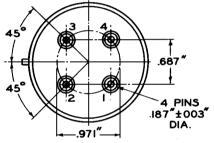
For other dimensions, see first page of the "Small 4-Pin" series.

* Add 0.030 * for solder on finished tube.



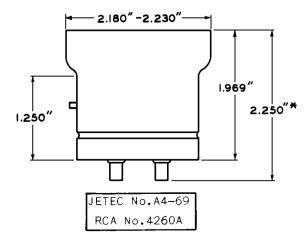
MEDIUM - METAL - SHELL JUMBO 4-PIN WITH BAYONET





JETEC No.A4-29 RCA No.1839B

SKIRTED MEDIUM-METAL-SHELL JUMBO 4-PIN WITH BAYONET

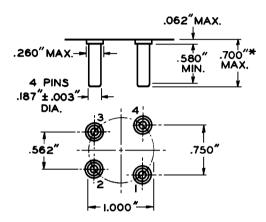


Other dimensions are same as Base JETEC No. A4-29 above.

'Add 0.060" for solder on finished tube.



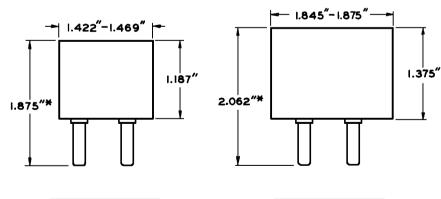
SUPER-JUMBO 4-PIN PIN DIMENSIONS AND ORIENTATION



Base-pin positions are held to tolerances such that pin centers may deviate a maximum distance of 0.010" from their true geometric position.

SMALL - SHELL SUPER-JUMBO 4-PIN

MEDIUM-SHELL SUPER-JUMBO 4-PIN



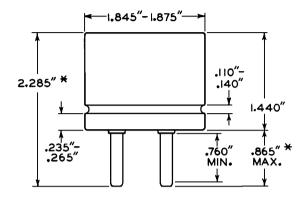
JETEC No.A4-15 RCA No.411

JETEC No.A4-16
RCA No.412

 st Add 0.060 st for solder on finished tube.



MEDIUM-METAL-SHELL SUPER-JUMBO 4-PIN



Detail of Groove



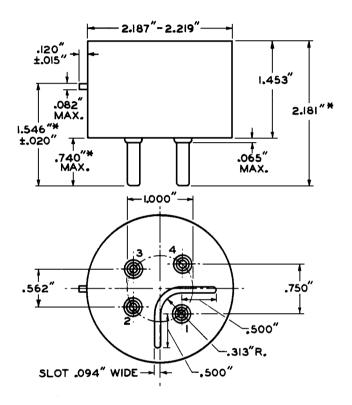
JETEC No.A4-81

For other dimensions, see first page of the "Super-Jumbo" series.

* Add 0.060" for solder on finished tube.



LARGE - SHELL SUPER-JUMBO 4 - PIN WITH BAYONET

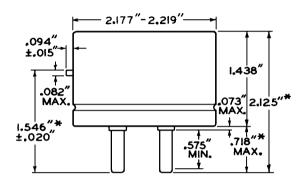


JETEC No.A4-88 RCA No.3982

For other dimensions, see first page of the "Super-Jumbo" series.



LARGE-METAL-SHELL SUPER-JUMBO 4-PIN WITH BAYONET



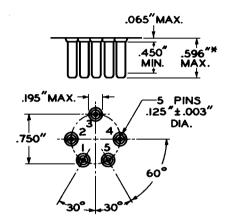
JETEC No.A4-18 RCA No.4310

For other dimensions, see first page of the "Super-Jumbo" series.

 $^{f *}$ Add 0.060" for solder on finished tube.



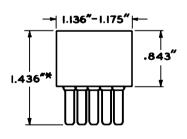
"SMALL 5-PIN" PIN DIMENSIONS AND ORIENTATION



Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA5-1) having thickness of 1/4" and five holes with diameters of 0.1360" \pm 0.0005" so located on a 0.7500" \pm 0.0005" diameter circle that the distance between centers of the four adjacent holes is 0.3750" \pm 0.0005" and the distance between the center of the remaining hole and its adjacent hole centers is 0.5300" \pm 0.0005".

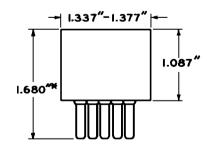
Pin fit in gauge is such that gauge together with supplementary weight totaling 4 pounds will not be lifted when pins are withdrawn.

SMALL - SHELL SMALL 5-PIN



JETEC No.A5-6 RCA No.5108

MEDIUM-SHELL SMALL 5-PIN

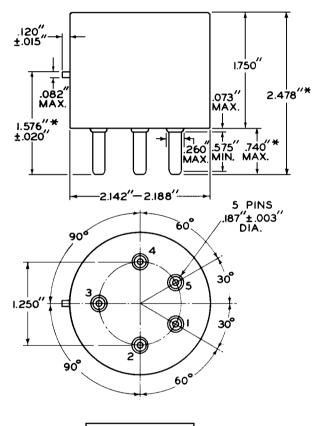


JETEC No. A5-11 RCA No. 5106

* Add 0.030 * for solder on finished tube.



MEDIUM-SHELL GIANT 5-PIN WITH BAYONET



JETEC No.A5-19 RCA No.5325

SPECIAL METAL-SHELL GIANT 5-PIN

See Tube Types 4-125A/4D21 and 4-250A/5D22

SPECIAL METAL-SHELL SUPER-GIANT 5-PIN

See Tube Type 4-1000A

 st Add 0.030" for solder on finished tube.



SMALL-SHELL DUODECAL 5-PIN

For details of this base, see corresponding DUODECAL 12-PIN type

DWARF-SHELL OCTAL 5-PIN
SMALL-SHELL OCTAL 5-PIN
SMALL-WAFER OCTAL 5-PIN
SMALL-WAFER OCTAL 5-PIN
WITH SLEEVE
INTERMEDIATE-SHELL OCTAL 5-PIN
SHORT INTERMEDIATE-SHELL OCTAL 5-PIN
SHORT INTERMEDIATE-SHELL OCTAL 5-PIN
WITH EXTERNAL BARRIERS
MEDIUM-SHELL OCTAL 5-PIN
SHORT JUMBO-SHELL OCTAL 5-PIN

For details of above bases, see corresponding OCTAL 8-PIN type

SMALL RADIAL 5-PIN

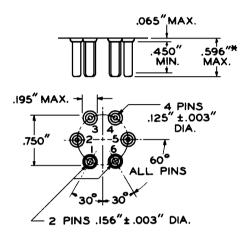
See OUTLINES -- Glass Types

MEDIUM-MOLDED-FLARE SEPTAR 5-PIN

See Tube Type 4-65A



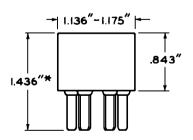
"SMALL 6-PIN" PIN DIMENSIONS AND ORIENTATION



Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA6-I) having thickness of I/4" and six holes, two adjacent with diameters of 0.1650" \pm 0.0005" and four with diameters of 0.1360" \pm 0.0005" so located on a 0.7500" \pm 0.0005" diameter circle that the distance between any two adjacent hole centers is 0.3750" \pm 0.0005".

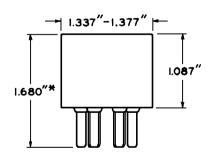
Pin fit in gauge is such that gauge together with supplementary weight totaling 4 pounds will not be lifted when pins are withdrawn.

SMALL-SHELL SMALL 6-PIN



JETEC No.A6-7 RCA No.6108

MEDIUM-SHELL SMALL 6-PIN

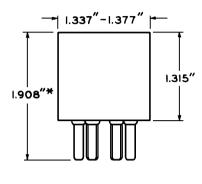


JETEC No.A6-12 RCA No.6106

* Add 0.030" for solder on finished tube.



LONG MEDIUM-SHELL SMALL 6-PIN



RCA No.6105

For other dimensions, see first page of the "Small 6-Pin" series.

SMALL-SHELL DUODECAL 6-PIN

For details of this base, see corresponding DUODECAL 12-PIN type

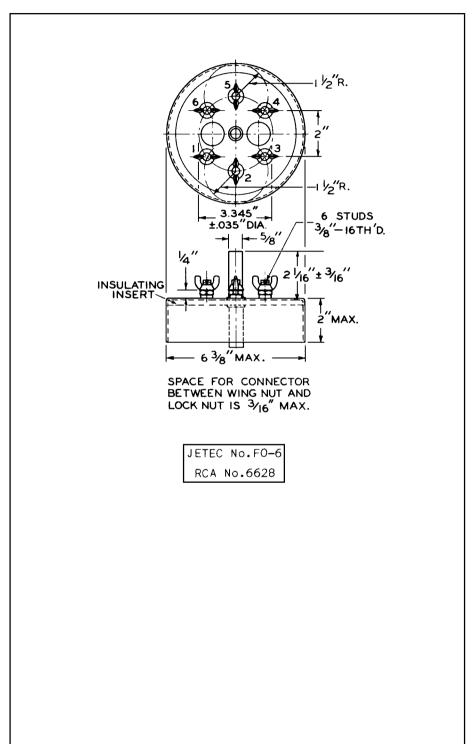
SMALL-SHELL OCTAL 6-PIN
INTERMEDIATE-SHELL OCTAL 6-PIN
SHORT INTERMEDIATE-SHELL OCTAL 6-PIN
SHORT INTERMEDIATE-SHELL OCTAL 6-PIN
WITH EXTERNAL BARRIERS
MEDIUM-SHELL OCTAL 6-PIN
SHORT JUMBO-SHELL OCTAL 6-PIN
SMALL-WAFER OCTAL 6-PIN
WITH SLEEVE

For details of above bases, see corresponding OCTAL-8 PIN type

 $^{f *}$ Add 0.030" for solder on finished tube.

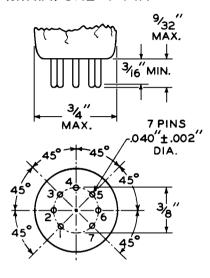


6-TERMINAL TYPES

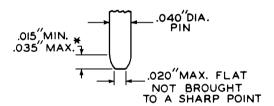




SMALL-BUTTON MINIATURE 7-PIN



Miniature Base Pin Contour



JETEC No.E7-1

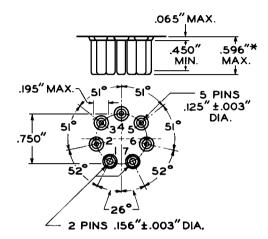
Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from flat-plate gauge (part of gauge JETEC No.GE7-1) having thickness of I/4" and eight holes with diameters of 0.0520" \pm 0.0005" so located on a 0.3750" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1434" \pm 0.0005".

The design of the socket should be such that circuit wiring can not impress lateral strains through the socket contacts on the base pins. The point of bearing of the contacts on the base pins should not be closer than 1/8" from the bottom of the seated tube.

^{*} This dimension around the periphery of any individual pin may vary within the limits shown.

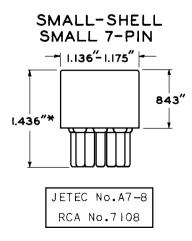


"SMALL 7-PIN" PIN DIMENSIONS AND ORIENTATION



Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA7-I) having thickness of I/4" and seven holes, two adjacent with diameters of 0.1650" \pm 0.0005" and five with diameters of 0.1360" \pm 0.0005" so located on a 0.7500" \pm 0.0005" diameter circle that the distance between centers of the adjacent 0.1650" diameter holes is 0.3288" \pm 0.0005" and the distance between centers of the adjacent 0.1360" diameter holes is 0.3229" \pm 0.0005".

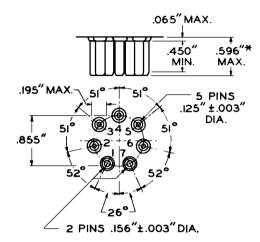
Pin fit in gauge is such that gauge together with supplementary weight totaling 4 pounds will not be lifted when pins are withdrawn.



 $^{\mathsf{k}}$ Add 0.030" for solder on finished tube.



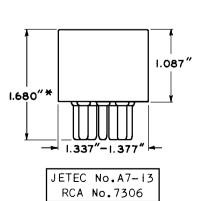
"MEDIUM 7-PIN" PIN DIMENSIONS AND ORIENTATION



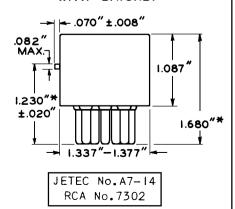
Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GA7-2) having thickness of 1/4" and seven holes, two adjacent with diameters of 0.1650" \pm 0.0005" and five with diameters of 0.1360" \pm 0.0005" so located on a 0.8550" \pm 0.0005" diameter circle that the distance between centers of the adjacent 0.1650" diameter holes is 0.3748" \pm 0.0005" and the distance between centers of the adjacent 0.1360" diameter holes is 0.3681" \pm 0.0005".

Pin fit in gauge is such that gauge together with supplementary weight totaling 4 pounds will not be lifted when pins are withdrawn.

MEDIUM-SHELL MEDIUM 7-PIN



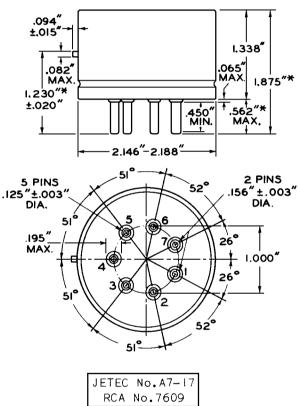
MEDIUM - SHELL MEDIUM 7-PIN WITH BAYONET



Add 0.030 " for solder on finished tube.



MEDIUM-METAL-SHELL GIANT 7-PIN WITH BAYONET



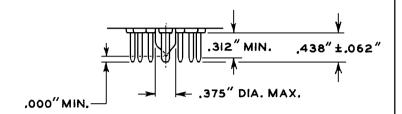
VENTILATED MEDIUM-METAL-SHELL GIANT 7-PIN

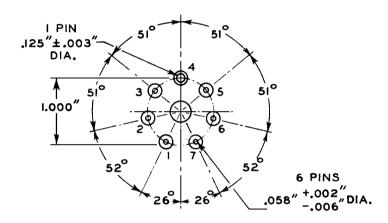
See Tube Type 4E27A/5-125B

Add 0.060" for solder on finished tube.

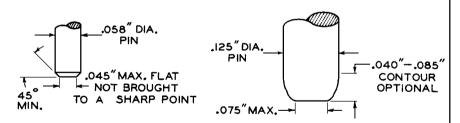


"SEPTAR" PIN DIMENSIONS AND ORIENTATION





Septar Base Pin Contour

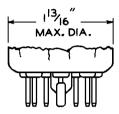


Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from flat-plate gauge having thickness of 3/8" and seven holes, one with diameter of 0.1450" ± 0.0005 " and six with diameters of 0.0800" ± 0.0005 " located on a 1.0000" ± 0.0005 " diameter circle at specified angles with a tolerance of ± 5 " for each angle. Gauge is also provided with a hole 0.500" ± 0.010 " concentric with pin circle.

It is essential that the socket shall be constructed with floating-contact clips.

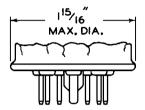


MEDIUM-BUTTON SEPTAR 7-PIN



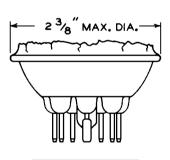
JETEC No.E7-20 RCA No.FSB6014

SMALL-WAFER SEPTAR 7-PIN



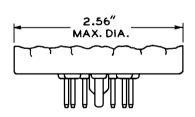
JETEC No.E7-21 RCA No.FSB712

MEDIUM MOLDED-FLARE SEPTAR 7-PIN



JETEC No.E7-2 RCA No.FSB603

JUMBO-BUTTON SEPTAR 7-PIN



JETEC No.E7-46 RCA No.FSB6038

For other dimensions of above bases, see first page of the "Septar" series



SMALL-SHELL DUODECAL 7-PIN

For details of this base, see corresponding SMALL-SHELL DUODECAL 12-PIN type

SMALL-BUTTON EIGHTAR 7-PIN

For details of this base, see corresponding SMALL-BUTTON EIGHTAR 8-PIN type

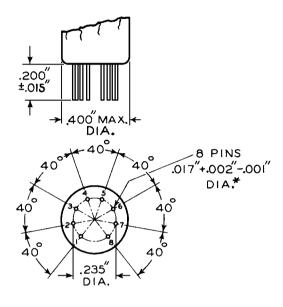
SMALL-SHELL OCTAL 7-PIN
SHORT INTERMEDIATE-SHELL OCTAL 7-PIN
SHORT INTERMEDIATE-SHELL OCTAL 7-PIN
WITH EXTERNAL BARRIERS
INTERMEDIATE-SHELL OCTAL 7-PIN
SHORT MEDIUM-SHELL OCTAL 7-PIN
WITH EXTERNAL BARRIERS, STYLES A AND B
MEDIUM-SHELL OCTAL 7-PIN
SHORT JUMBO-SHELL OCTAL 7-PIN
WITH EXTERNAL BARRIERS
SMALL-WAFER OCTAL 7-PIN
SMALL-WAFER OCTAL 7-PIN
WITH SLEEVE

For details of above bases, see corresponding OCTAL 8-PIN type

SMALL RADIAL 7-PIN
See OUTLINES--Glass Tubes



SMALL-BUTTON SUB-MINAR 8-PIN



JETEC No.E8-9

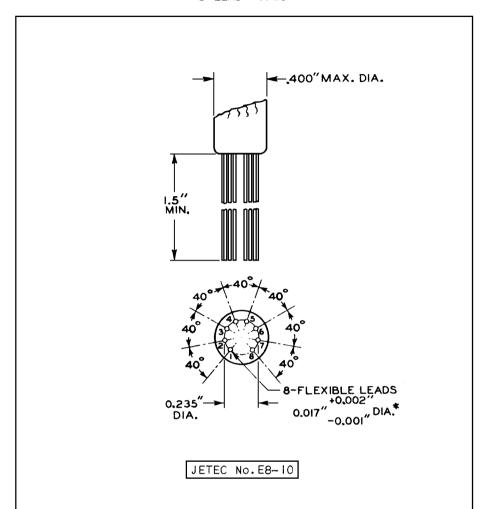
Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from flat-plate gauge JETEC No.GE8-1. This gauge contains a flat-plate section having thickness of 13/64" and nine holes with diameters of 0.0240" \pm 0.0005" so located on a 0.2350" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.0804" \pm 0.0005".

The design of the socket should be such that circuit wiring can not impress lateral strains through the socket contacts on the base pins. The point of bearing of the contacts on the base pins should not be closer than 0.050" from the bottom of the seated tube.

^{*} The specified pin diameter applies only in the zone between 0.050" from the base seat and the end of the pin.

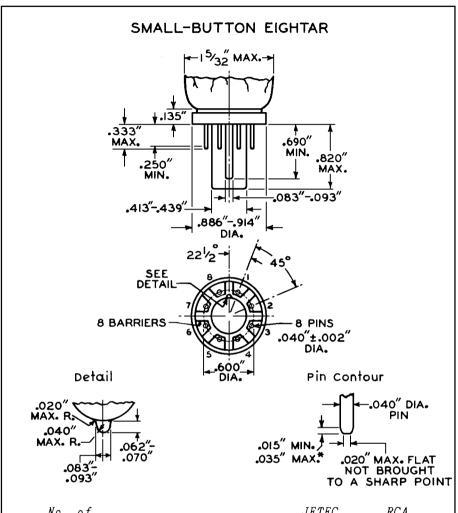


8-LEAD TYPES



* The specified lead diameter applies only in the zone between 0.050" and 0.250" from the base seat. Between 0.250" and 1.500", a maximum diameter of 0.021" is held. Outside of these zones, the lead diameter is not controlled.





No. of Pins	Pins	JETEC No.	RCA No.*
8-Pin	1,2,3,4,5,6,7,8	B8-181	80000
7-Pin	2,3,4,5,6,7,8	B7-182	80000
7-Pin≜	1,2,3,4, 6,7,8	B7-183	80000

Base-pin positions are held to tolerances such that the base will fit a flat-plate gauge having a thickness of 3/8" and eight equally spaced holes of 0.0550" $\pm~0.0005$ " diameter located on a 0.6000" $\pm~0.0005$ " diameter circle. The gauge is also provided with a center hole to provide 0.010" diametric clearance for the lug and key. Pin fit in the gauge shall be such that the entire length of pins will, without undue force, enter into and disengage from the gauge.

 $^{^{\}star}$ This dimension around the periphery of any individual pin may vary within the limits shown.

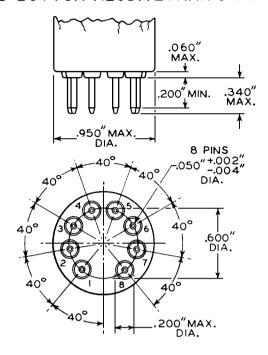
 $^{^{*}}$ This number applies to wafer only.

Arrangement 1.

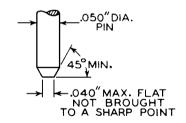
Arrangement 2.



SMALL-BUTTON NEODITETRAR 8-PIN



Neoditetrar-Base Pin Contour



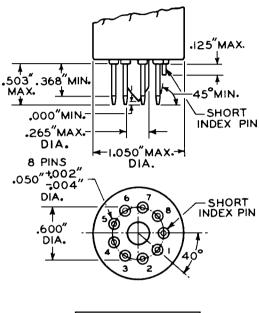
JETEC No.E8-49 RCA No.FSB6006#

Base-pin positions are held to tolerances such that entire length of pins will, without undue force, pass into and disengage from flat-plate gauge having thickness of 1/4" and nine holes with diameters of 0.0700" \pm 0.0005" so located on a 0.6000" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.2052" \pm 0.0005".

This number applies to stem only.



SMALL-BUTTON DITETRAR 8-PIN

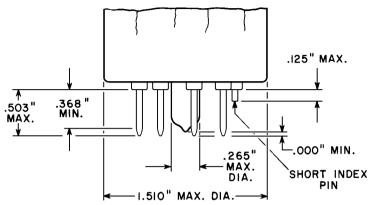


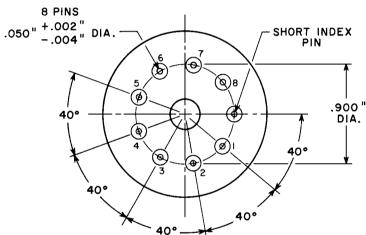
JETEC No.E8-11 RCA No. {FSB675# FSB6015#

Base-pin positions are held to tolerances such that entire length of pins will, without undue force, pass into and disengage from flat-plate gauge having thickness of 1/4" and nine holes with diameters of $0.0700"\pm0.0005"$ so located on a $0.6000"\pm0.0005"$ diameter circle that the distance along the chord between any two adjacent hole centers is $0.2052"\pm0.0005"$. Gauge is also provided with a hole having diameter of $0.300"\pm0.001"$ concentric with the pin circle.

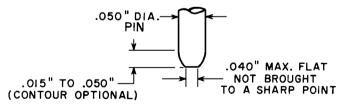
 $^{^{\#}}$ This number applies to stem only.

SMALL-BUTTON SUPERDITETRAR Pin Dimensions and Orientation





Superditetrar-Base-Pin Contour



JEDEC No.E8-78 RCA No.FSB6055#

Base-pin positions are held to tolerances such that entire length of pins will, without undue force, pass into and disengage from a flat-plate gauge having a thickness of

This number applies to stem only.



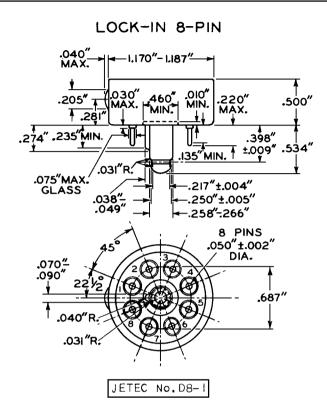
Bases

8-Pin Types

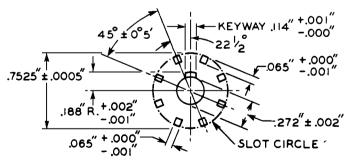
I/4" and nine holes with diameters of 0.0700" \pm 0.0005" so located on a 0.9000" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.3078" \pm 0.0005". Gauge is also provided with a hole having diameter of 0.300" \pm 0.001" concentric with the pin circle.





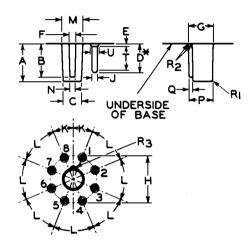


Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from gauge JETEC No.GD8-1. This gauge contains a flat-plate section having thickness of $1/4^{\prime\prime}$ and eight slots located and dimensioned as shown on the following diagram. Flat-plate section is also provided with a hole having diameter of 0.272" \pm 0.002" concentric with slot circle, and with a keyway as shown on the diagram.





"OCTAL" PIN DIMENSIONS AND ORIENTATION AND INDEX GUIDE



	Min.	Center	Max.		Min.	Center	Max.
Α	.550"	.560"	.570"	L	_	45 ⁰	_
В	.490"	.500"	.510"	М	.305"	.312"	.317"
С	.300"	.308"	.315"	N	.075"	.080"	.085"
D	. 427"	. 437"	. 447"	P	. 343"	. 353"	. 363"
Ε	_	-	.050"	Q	.040"	.047"	.055"
F	.085"	.090"	.095"	RI		.031"	_
G	. 352"	. 362"	.372"	R ₂	-	-	.050"
Н	_	• 687"	-	R ₃	_	.040"	-
J	.090"	.093"	.096"	T	.340"	_	
K	_	22.5°	_	lυ	_	-	. 135"

Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GB8-I) having thickness of I/4" and eight holes with diameters of $0.1030"\pm0.0005"$ so located on a $0.6870"\pm0.0005"$ diameter circle that the distance along the chord between any two adjacent hole centers is $0.2629"\pm0.0005"$.

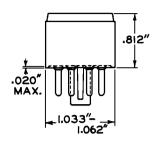
Pin fit in gauge is such that gauge together with supplementary weight totaling 2 pounds will not be lifted when pins are withdrawn.

 $^{^{}f *}$ Add 0.030" for solder on finished tube.

Bases

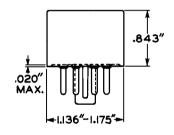
8-Pin Types

DWARF-SHELL OCTAL



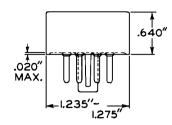
No. of Pins		P	ins		JÉDEC No.	RCA No.
5-Pin	١,	3,	5,	7,8	B5-45	_

SMALL-SHELL OCTAL



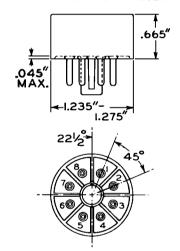
No. of Pins	Pins	JEDEC No.	RCA
8-Pin	1,2,3,4,5,6,7,8	B8- I	8529
7-Pin	1,2,3,4,5, 7,8	B7-2	7529
6-Pin	1,2,3, 5, 7,8	B6-3	6529
5-Pin	1,2, 4, 6, 8	B5-5	5529

SHORT INTERMEDIATE-SHELL OCTAL



No. of Pins	Pins	$egin{aligned} JEDEC\ No. \end{aligned}$	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-46	8555
7-Pin	1,2,3,4,5, 7,8	B7-47	7555
6-Pin	1,2,3; 5, 7,8	B6-48	6555
5-Pin	1.2, 4, 6, 8	B5-49	5555

SHORT INTERMEDIATE-SHELL OCTAL WITH EXTERNAL BARRIERS



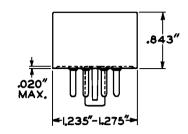
No. of Pins	Pins	JEDEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-58	8565
7-Pin <mark>a</mark>	1,2,3,4,5, 7,8	B7-59	7565
7-Pin b	1,2,3, 5,6,7,8	B7-211	_
6-Pin ^a	1,2,3, 5, 7,8	B6-60	6565
6-Pin b	2,3,4,5, 7,8	B6-84	6765
5-Pin <mark>a</mark>	1,2, 4, 6, 8	B5-62	5565
5-Pin b	2,3, 5, 7,8	B5-85	5765
5-Pin ^c	2, 4,5, 7,8	B5-187	-

a Arrangement 1.

b Arrangement 2.

c Arrangement 3.

INTERMEDIATE-SHELL OCTAL



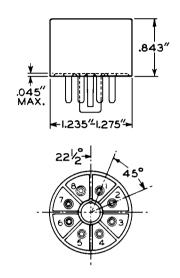
No. of Pins	Pins	JEDEC No.	RCA
8-Pin	1,2,3,4,5,6,7,8	B8-6	8537
7-Pin a	1,2,3,4,5, 7,8	B7 → 7	7537
7-Pin b	1,2,3, 5,6,7,8	B7-166	39100
6-Pinª	1,2,3, 5, 7,8	B6-8	6537
6-Pin b	2,3,4,5, 7,8	B6-81	6737
5-Pin a	1,2, 4, 6, 8	B5-10	5537
5-Pin b	2,3, 5, 7,8	B5-82	5737

a Arrangement 1.

b Arrangement 2.

8-Pin Types

INTERMEDIATE-SHELL OCTAL with external barriers



No. of Pins	Pins	JEDEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-142	8566
7-Pin	1,2,3,4,5, 7,8	B7-143	7566
6-Pin ^a	1,2,3, 5, 7,8	B6-144	6566
6-Pin ^b	2,3,4,5, 7,8	B6-145	6766
6-Pin [¢]	2,3, 5,6,7,8	B6-229	39111
5-Pin ^a	1,2, 4, 6, 8	B5-146	5566
5-Pin b	2,3, 5, 7,8	B5-147	5766

a Arrangement 1.

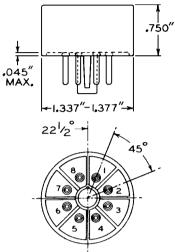
b Arrangement 2.

c Arrangement 3.

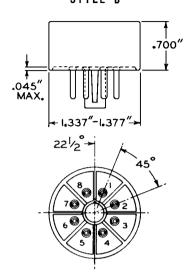
8-Pin Types

SHORT MEDIUM-SHELL OCTAL WITH EXTERNAL BARRIERS





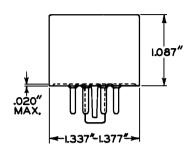
STYLE B



No. of Pins	Pins	Style	JEDEC No.	RCA
8-Pin	1,2,3,4,5,6,7,8	Α	B8-110	39081
8-Pin	1,2,3,4,5,6,7,8	В	B8-118	8564
7-Pina	1,2,3,4,5, 7,8	Α	B7-111	_
7Pin ^a	1,2,3,4,5, 7,8	В	B7-119	7564
7-Pin ^b	1,2,3, 5,6,7,8	В	B7-227	39113
7-Pin ^c	1,2,3,4, 6,7,8	В	B7-235	_
6-Pin ^a	1,2,3, 5, 7,8	Α	B6-112	_
6-Pin <mark>a</mark>	1,2,3, 5, 7,8	В	B6-120	6564
6-Pin b	2,3,4,5, 7,8	Α	B6-148	_
6-Pin ^b	2,3,4,5, 7,8	В	B6-122	6764
5Pin ^a	1,2, 4, 6, 8	Α	B5-113	_
5-Pin ^a	1,2, 4, 6, 8	В	B5-121	5564
5-Pin <mark>b</mark>	2,3, 5, 7,8	Α	B5-149	_
5-Pin ^b	2,3, 5, 7,8	В	B5-123	5764
5-Pin ^c	1,2,3, 5, 7	Α	B5-234	_
5-Pin ^c	1,2,3, 5, 7	В	B5-239	39116
5-Pin ^d	2, 4,5, 7,8	В	B5-190	39110

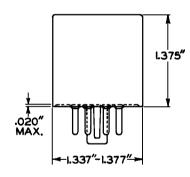
- a Arrangement 1.
- b Arrangement 2.
- c Arrangement 3.
- d Arrangement 4.

MEDIUM-SHELL OCTAL



No. of Pins	Pins	JEDEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	88-11	8533
7-Pin	1,2,3,4,5, 7,8	87- ř2	7533
6-Pin	1,2,3, 5, 7,8	B6-13	6533
5-Pin ^a	1,2, 4, 6, 8	B5 - 15	5533
5-Pin ^b	2,3, 5, 7,8	B5-224	5733

LONG MEDIUM-SHELL OCTAL



No. of Pins	Pins	JEDEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B865	8545
5-Pin	2,3, 5, 7,8	B5-80	5545

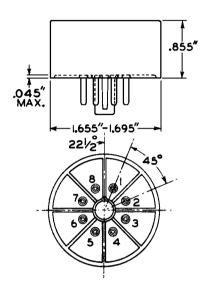
For other dimensions of above bases, see first page of the "Octal" series

a Arrangement 1.

b Arrangement 2.



SHORT JUMBO-SHELL OCTAL WITH EXTERNAL BARRIERS

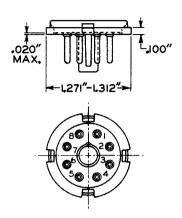


No.of Pins	Pins	JETEC No.	RCA
8-Pin	1,2,3,4,5,6,7,8	B8-71	8556
7-Pin	1,2,3,4,5, 7,8	B7-72	7556
6-Pin	1,2,3, 5, 7,8	B6-73	6556
5-Pin	1.2. 4. 6. 8	B5-74	5556

For other dimensions, see first page of the "Octal" series

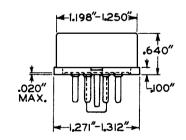


SMALL-WAFER OCTAL



No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1, 2, 3, 4, 5, 6, 7, 8	B8-21	8527 8540
7-Pin	1,2,3,4,5, 7,8	B7-22	7527 7540
6-Pin	1,2,3, 5, 7,8	B6-23	6527 6540
5-Pin	1,2, 4, 6, 8	B5-25	5527 5540

SMALL-WAFER OCTAL WITH SLEEVE

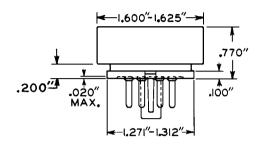


No. of	Pins	JETEC	RCA
Pins		No.	No.
8-Pin	1.2.3.4.5.6.7.8	B8-44	MB8527-602

For other dimensions of above bases, see first page of the "Octal" series

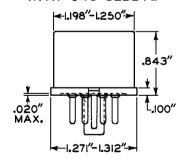


SMALL-WAFER OCTAL WITH "770" SLEEVE



No. of Pins	Pins	JETEC No.	_	RCA Vo.
8-Pin	1,2,3,4,5,6,7,8	B8-150	MB8540-7	MB8527 - 603
7-Pin	1,2,3,4,5, 7,8	B7-151	MB7540-4	-
6-Pin [■]	1,2,3, 5, 7,8	B6-152	MB6540-5	_
6-Pin▲	2,3,4,5, 7,8	B6-153	MB6740-1	_
5-Pin [■]	1,2, 4, 6, 8	B5-154	MB5540-1	_
5-Pin≜	2,3, 5, 7,8	B5-155	MB5740-1	_

SMALL-WAFER OCTAL WITH"843"SLEEVE



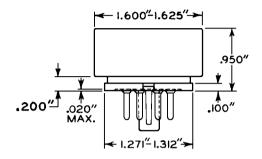
No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-26	MB8527-1 MB8540-3
7-Pin	1,2,3,4,5, 7,8	B7-27	MB7527-1 MB7540-1
6-Pin	1,2,3, 5, 7,8	B6-28	MB6527-I MB6540-3
5 - Pin	1,2, 4, 6, 8	B5-30	MB5527-1 MB5540-2

For other dimensions of above bases, see first page of the "Octal" series

- Arrangement 1.
- ▲ Arrangement 2.



SMALL-WAFER OCTAL WITH "950" SLEEVE



No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-191	MB8540-8
7-Pin	1,2,3,4,5, 7,8	B7-192	MB7540-5
6-Pin [■]	1,2,3, 5, 7,8	B6-193	MB6540-6
6-Pin▲	2,3,4,5, 7,8	B6-194	MB6740-2
5-Pin [™]	1,2, 4, 6, 8	B5-195	MB5540-3
5-Pin≜	2,3, 5, 7,8	B5-196	MB5740-2

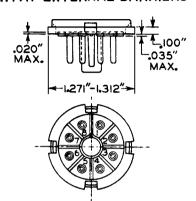
For other dimensions of above base, see first page of the "Octal" series

Arrangement 1.

Arrangement 2.

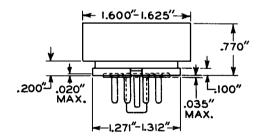


SMALL-WAFER OCTAL WITH EXTERNAL BARRIERS



No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-67	8559
7-Pin	1,2,3,4,5, 7,8	B7-68	755 9
6-Pin [■]	1,2,3, 5, 7,8	B6-69	6559
6-Pin≜	2,3,4,5, 7,8	B6-205	6759
5-Pin [■]	1,2, 4, 6, 8	B570	5559
5-Pin≜	2,3, 5, 7,8	B5-206	5759

SMALL-WAFER OCTAL WITH EXTERNAL BARRIERS AND "770" SLEEVE



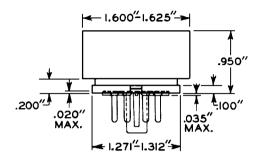
No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-159	MB8559-2
7-Pin	1,2,3,4,5, 7,8	B7-160	MB7559-1
6-Pin [■]	1,2,3, 5, 7,8	B6-161	MB6559-1
6-Pin≜	2,3,4,5, 7,8	B6-162	MB6759-1
5-Pin [■]	1,2, 4, 6, 8	B5-163	MB5559-1
5-Pin≜	2,3, 5, 7,8	B5-164	MB5759-1

For other dimensions of above bases, see first page of the "Octal" series

- Arrangement 1.
- Arrangement 2.



SMALL-WAFER OCTAL WITH EXTERNAL BARRIERS AND "950" SLEEVE



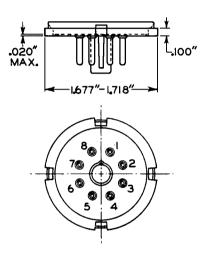
No. of Pins	Pins	JETEC No.	RCA No.
8-Pin	1,2,3,4,5,6,7,8	B8-197	MB8559-4
7-Pin	1,2.3,4,5, 7,8	B7-198	мв7559 – 2
6-Pin■	1,2,3, 5, 7,8	B6-199	MB6559 - 2
6-Pin≜	2,3,4,5, 7,8	B6-200	MB6759-2
5-Pin [■]	1,2, 4, 6, 8	B5-201	MB5559-2
5-Pin≜	2,3, 5, 7,8	85 202	MB5759-2

For other dimensions of above base, see first page of the "Octal" series

Arrangement 1.
Arrangement 2.



LARGE-WAFER OCTAL



No. of Pins 8-Pin Pins

1,2,3,4,5,6,7,8

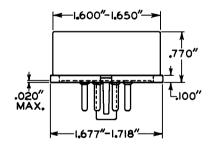
JETEC No.

B8-32

RCA No.

8534

LARGE-WAFER OCTAL WITH SLEEVE



No. of Pins

Pins

JETEC No. RCA No.

8-Pin

1, 2, 3, 4, 5, 6, 7, 8

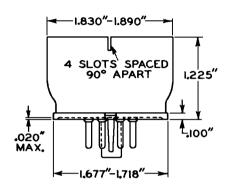
B8-86

MB8534-601

For other dimensions of above bases, see first page of the "Octal" series



LARGE-WAFER OCTAL WITH FLARED SLEEVE



No. of Pins

Pins

JETECNo.

RCANo.

8-Pin

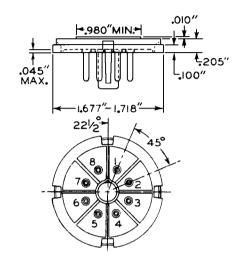
1,2,3,4,5,6,7,8 B8-188

MB8534-600

For other dimensions, see first page of the "Octal" series

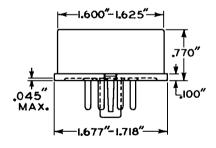


LARGE-WAFER OCTAL WITH EXTERNAL BARRIERS



No. of Pins	Pins	${\it JETEC} \ {\it No.}$	RCA
8-Pin	1,2,3,4,5,6,7,8	B8-94	8554
7-Pin	1,2,3,4,5, 7,8	B7-95	7554
6-Pin	1,2,3, 5, 7,8	B6-96	6554
5-Pin	1.2. 4. 6. 8	B5-97	5554

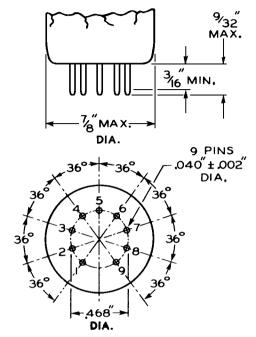
LARGE-WAFER OCTAL WITH EXTERNAL BARRIERS AND SLEEVE



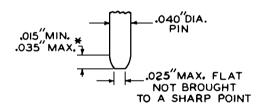
No. of Pins	Pins	${\it JETEC \over \it No.}$	RCA No.	
8-Pin 7-Pin	1,2,3,4,5,6,7,8 1,2,3,4,5, 7,8	B8-98 B7-99	MB8554-1 MB8554-600 MB7554-1 -)
6-Pin 5-Pin	1,2,3, 5, 7,8 1,2, 4, 6, 8	B6-100 B5-101	MB6554-1 - MB5554-2 -	

For other dimensions of above bases, see first page of the "Octal" series

SMALL-BUTTON NOVAL 9-PIN



Noval-Base-Pin Contour



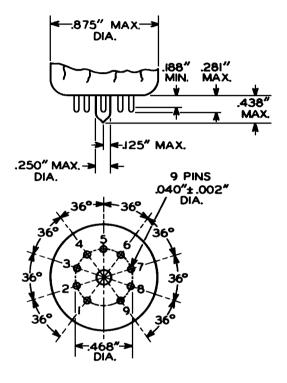
JEDEC No.E9-1

Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from gauge JEDEC No.GE9-1. This gauge contains a flat-plate section having thickness of 1/4" and ten holes with diameters of 0.0520" \pm 0.0005" so located on a 0.4680" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1446" \pm 0.0005".

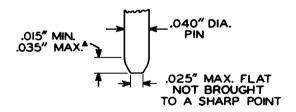
The design of the socket should be such that circuit wiring can not impress lateral strains through the socket contacts on the base pins. The point of bearing of the contacts on the base pins should not be closer than 1/8" from the bottom of the seated tube.

^{*} This dimension around the periphery of any individual pin may vary within the limits shown.

SMALL-BUTTON NINAR 9-PIN Pin Dimensions and Orientation



Ninar-Base-Pin Contour



JEDEC No.E9-37

Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from gauge JEDEC No.GE9-2. This gauge contains a flat-plate section having thickness of 0.250" and ten holes with diameters of 0.0520" \pm 0.0005" so located on a 0.4680" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1446" \pm 0.0005". Gauge is also provided with a hole 0.281" minimum diameter concentric with the pin circle.

This dimension around the periphery of any individual pin may vary within the limits shown.



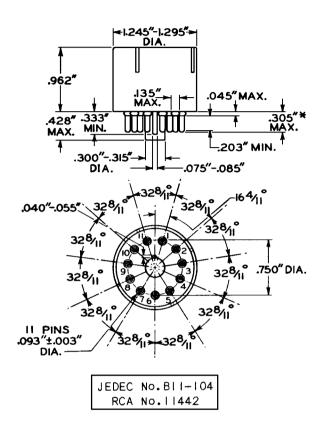
Bases

9-Pin Types

SMALL-BUTTON NINAR 9-PIN (CONT'D)

The design of the socket should be such that circuit wiring can not impress lateral strains through the socket contacts on the base pins. The point of bearing of the contacts on the base pins should not be closer than 1/8" from the bottom of the seated tube.

SMALL-SHELL NEOSUBMAGNAL II-PIN

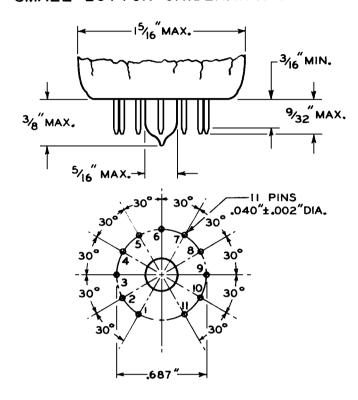


Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JEDEC Group 2, No.GBII-2) having thickness of 1/4" and eleven holes with diameters of 0.1030" \pm 0.0005" so located on a 0.7500" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.213" \pm 0.0005". Pin fit in gauge is such that gauge together with supplementary weight totaling 3 pounds will not be lifted when pins are withdrawn.

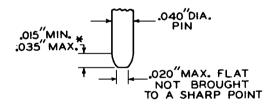
^{*} Add 0.030" for solder on finished tube.



SMALL-BUTTON UNIDEKAR II-PIN



Unidekar Base Pin Contour



JETEC No.EII-22 RCA No.FSB6019

Base-pin positions are held to tolerances such that entire length of pins will without undue force pass into and disengage from flat-plate gauge having thickness of 1/4" and twelve holes with diameters of 0.0520" \pm 0.0005" so located on a 0.6870" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1778" \pm 0.0005". Gauge is also provided with a hole 0.3750" \pm 0.0100" concentric with the pin circle.

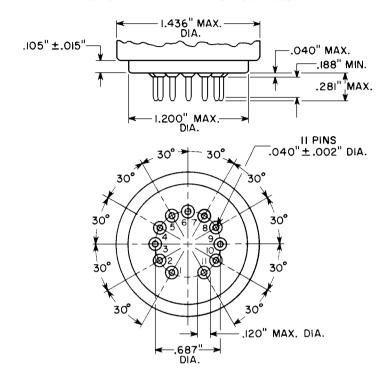
^{*} This dimension around the periphery of any individual pin may vary within the limits shown.



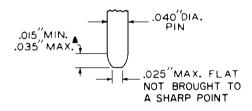
SMALL-BUTTON UNIDEKAR II-PIN (CONT'D)

The design of the socket should be such that circuit wiring can not impress lateral strains through the socket contacts on the base pins. The point of bearing of the contacts on the base pins should not be closer than 1/8" from the bottom of the seated tube.

LARGE-WAFER ELEVENAR II-PIN WITH RING Pin Dimensions and Orientation



Elevenar-Base-Pin Contour



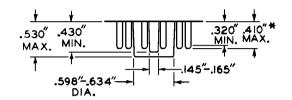
JEDEC No.EII-81

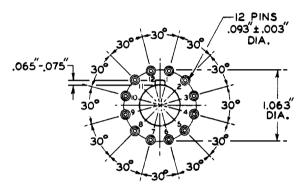
Base-pin positions are held to tolerances such that entire length of pins will, without undue force, pass into and disengage from flat-plate gauge (JEDEC No.GEII-I) having a thickness of 0.250" and twelve holes with diameters of 0.0520" \pm 0.0005" so located on a 0.6870" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1778" \pm 0.0005". Gauge is also provided with a hole 0.3750" \pm 0.0005" diameter concentric with the pin circle.

This dimension around the periphery of any individual pin may vary within the limits shown. The surface of the pin is convex or conical in shape and not brought to a sharp point.



"DUODECAL" PIN DIMENSIONS AND ORIENTATION AND INDEX GUIDE





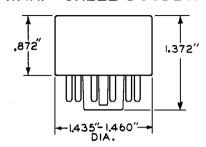
Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GB12-!) having thickness of 1/4" and twelve holes with diameters of 0.1030" \pm 0.0005" so located on a 1.0630" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.2751" \pm 0.0005".

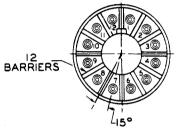
Pin fit in gauge is such that gauge together with supplementary weight totaling 3 pounds will not be lifted when pins are withdrawn.

* Add 0.030 for solder on finished tube.



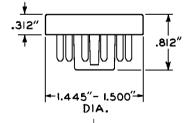
DWARF-SHELL DUODECAL

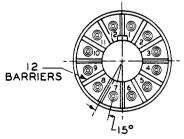




No. of Pins	Pins	${\it JETEC \over \it No.}$	RCA
12-Pin	1,2,3,4,5,6,7,8,9,10,11,12	B12-157	12263
6-Pin	1,2,3, 10,11,12	B6-158	6263

ULTRASHORT SMALL-SHELL DUODECAL



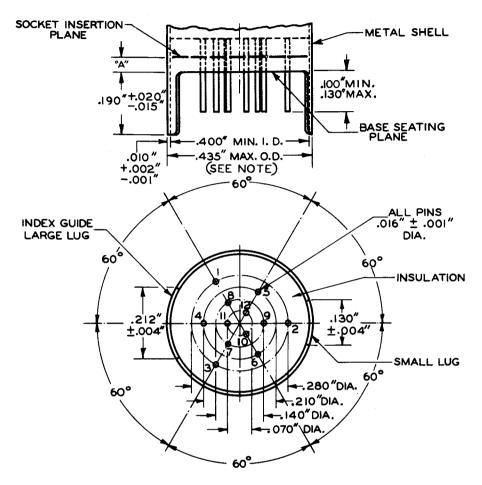


 No. of Pins
 JETEC No.
 RCA No.

 12-Pin
 1,2,3,4,5,6,7,8,9,10,11,12, B12-186
 12261

For other dimensions of above bases, see first page of the "Duodecal" series

MEDIUM CERAMIC-WAFER TWELVAR BASE Pin Dimensions and Orientation and Index Guide



NOTE: MAXIMUM OUTSIDE DIAMETER OF 0.440" IS PERMITTED ALONG THE 0.190" LUG LENGTH.

No. of Pins		Pins			Dimension "A" Max.	JEDEC No.	RCA $No.$
12 - Pin	1,2,3,4,5,6	7,8,9	,10,11	, 12	0.040"	E12-64	_
7 – Pin a	1, 3, 5,6	,7,	10,	12	0.020"	E7-77	
5 – Pin b	2, 4,	8,	10,	12	0.040"	E5-79	_
5 - Pin ^c	2. 4.	8.	10.	12	0.040"	E5-65	_

a Pins 2,4,8,9 are cut off to a length such that their ends do not touch the socket insertion plane. Pin 11 is omitted.

Pin 7 is cut off to a length such that its end does not touch the socket insertion plane. Pins 1,3,5,6,9,11 are omitted.

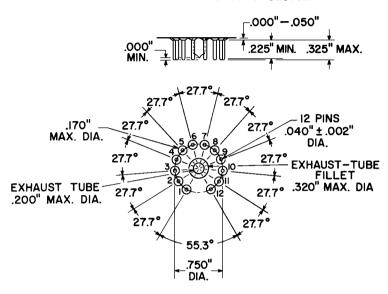
Pins 1,3,5,6,7,9 are cut off to a length such that their ends do not touch the socket insertion plane. Pin 11 is omitted.

Bases

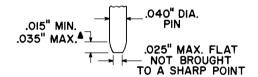
12-Pin Types

Base-pin positions and lug positions shall be held to tolerances such that entire length of pins and lugs will without undue force pass into and disengage from flat-plate gauge (JEDEC No.GEI2-5) having thickness of 0.250" and twelve holes of 0.0350" \pm 0.0005" diameter located on four concentric circles as follows: Three holes located on 0.2800" \pm 0.0005", three holes located on 0.2100" \pm 0.0005", three holes located on 0.1400" \pm 0.0005", three holes located on 0.1400" \pm 0.0005", three holes located on 0.0700" \pm 0.0005" diameter circles at specified angles with a tolerance of \pm 0.08° for each angle. In addition, gauge provides for two curved slots with chordal lengths of 0.2270" \pm 0.0005" and 0.1450" \pm 0.0005" located on 0.4200" \pm 0.0005" diameter circle concentric with pin circles at $180^{\circ} \pm 0.08^{\circ}$ and having a width of 0.0230" \pm 0.0005".

DUODECAR 12-PIN Pin Dimensions and Orientation



Duodecar-Base-Pin Contour



Base-pin positions are held to tolerances such that entire length of pins will, without undue force, pass into and disengage from flat-plate gauge having a thickness of 0.250" and thirteen holes with diameters of 0.0520" \pm 0.0005" so located on a 0.7500" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.1795" ± 0.0005". Gauge is also provided with a hole 0.375" + 0.005" - 0.000" diameter concentric with the pin circle.

This dimension around the periphery of any individual pin may vary within the limits shown. The surface of the pin is convex or conical in shape and not brought to a sharp point.

Bases

12-Pin Types

SMALL-BUTTON DUODECAR 12-PIN LARGE-BUTTON DUODECAR 12-PIN



JEDEC No.E12-70

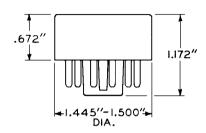


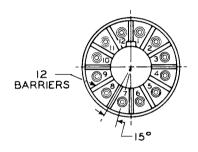
JEDEC No.E12-74

Fits Gauge JEDEC No. GE12-3 Fits Gauge JEDEC No. GE12-4



SHORT SMALL-SHELL DUODECAL



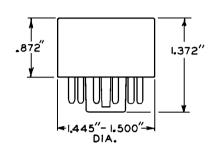


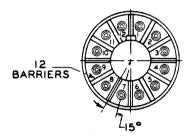
No. of Pins	Pins	JETEC No.	RCA
12-Pin	1,2,3,4,5,6,7,8,9,10,11,12	B12-207	12267
6-Pin	1.2. 6. [0.1].12	B6-203	6267

For other dimensions, see first page of the "Duodecal" series



SMALL-SHELL DUODECAL





No. of Pins	Pins		JETEC No.	RCA No.
12-Pin	1,2,3,4,5,6,7,8,	9,10,11,12	B12-43	12253
10-Pin	1,2,3,4, 6,7,8,	9,10, 12	B10-75	10253
7-Pin [■]	1,2, 6,7,	10,11,12	B7-51	7253
7-Pin≜	1,2,3, 6,	10,11,12	B7-179	_
6~Pin [■]	1,2, 6,	10,11,12	B6-63	6253
6-Pin≜	4,5,6,7,8,	12	B6-180	-
5-Pin	1,2,	10,11,12	B5-57	5253

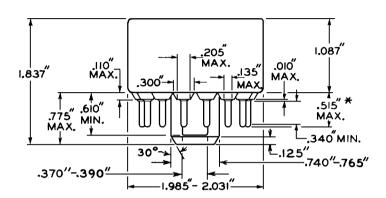
For other dimensions, see first page of the "Duodecal" series

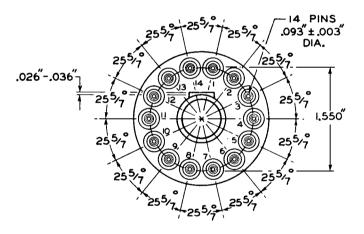
Arrangement 1.

[🖣] Arrangement 2.



SMALL-SHELL NEODIHEPTAL





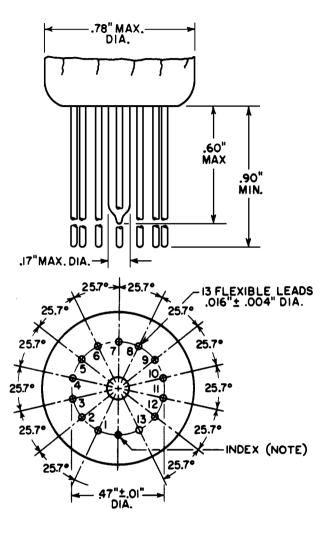
No. of Pins	Pins	JETEC No.	RCA No.
4→Pin	1,2,3,4,5,6,7,8,9,10,11,12,13,14	B14-130	14560
12-Pin	1,2,3,4,5,6,7, 9, 11,12,13,14	B12-131	12560

Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GB14-2) having thickness of 1/4" and fourteen holes with diameters of 0.1030" \pm 0.0005" so located on a 1.5500" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.3449" \pm 0.0005".

Pin fit in gauge is such that gauge together with supplementary weight totaling 3 pounds will not be lifted when pins are withdrawn.

^{*} Add 0.030" for solder on finished tube.

SMALL-BUTTON THIRTEENAR



NOTE: LEAD IS CUT OFF WITHIN 0.04 INCH FROM THE GLASS BUTTON.

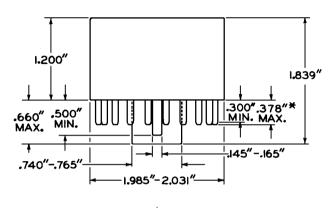
No. of Leads	Leads	JEDEC No.	RCA No.
13-Lead	1,2,3,4,5,6,7,8,9,10,11,12,13	E13-71	_
12-Lead ♣	1,2,3,4,5,6,7,8,9,10,11,12,	E12-72	_

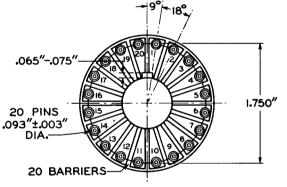
lacktriangle Lead 13 is cut off within 0.04 inch from the glass button.





SMALL-SHELL BIDECAL





No. of Pins	Pins	JETEC No.	RCA
20-Pin			No.
20-F I II	l through 20	B20-102	20158

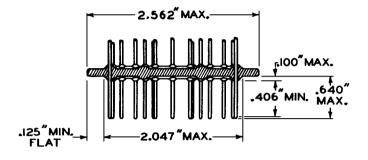
Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge (JETEC No.GB20-1) having thickness of 1/4" and twenty holes with diameters of 0.1030" \pm 0.0005" so located on a 1.7500" \pm 0.0005" diameter circle that the distance along the chord between any two adjacent hole centers is 0.2738" \pm 0.0005".

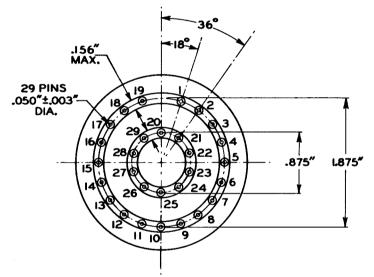
Pin fit in gauge is such that gauge together with supplementary weight totaling 3 pounds will not be lifted when pins are withdrawn.

 $^{^{}ullet}$ Add 0.030" for solder on finished tube.

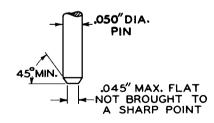


SMALL-BUTTON TWENTYNINAR





Twentyninar Base Pin Contour



No. of Pins	Pins	JETEC No.	RCA No.
29-Pin	l through 29	E29-17	-
22-Pin	l through 19,21,25,28	E22-16	FSB693
8-Pin	2,6,10,14,18,21,25,28	E8-19	FSB693A

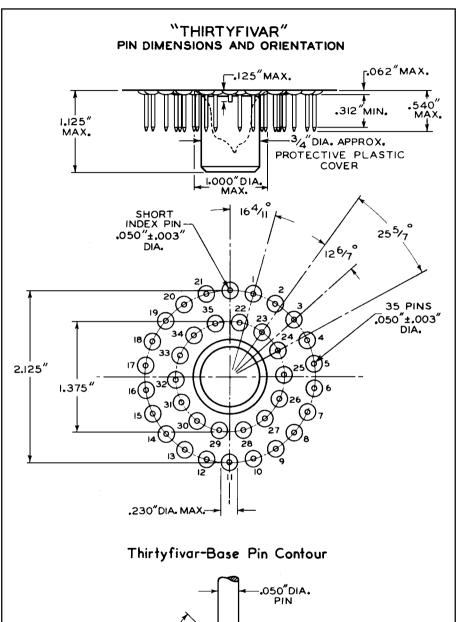


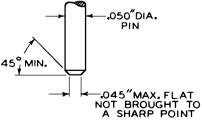
SMALL-BUTTON TWENTYNINAR (CONT'D)

Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge having thickness of 3/8" and twenty-nine holes with diameters of 0.0700" \pm 0.0005", nineteen of which are located with hole centers corresponding to the specified location of pin centers on a 1.8750" \pm 0.0005" diameter circle, and ten of which are located with hole centers corresponding to the specified location of pin centers on a 0.8750" \pm 0.0005" diameter circle concentric with the 1.8750" circle.

Pin fit in gauge is such that entire length of pins will, without undue force, enter into and disengage from the gauge.







Base-pin positions are held to tolerances such that entire length of pins will enter flat-plate gauge having thickness of 3/8" and thirty-six holes with diameters of 0.0700" $\pm \ 0.0005$ ", twenty-two of which are located with hole centers corresponding to the specified location of

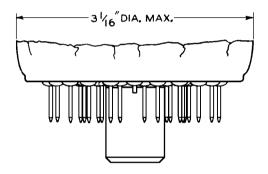


THIRTYFIVAR (CONT'D)

pin centers on a 2.1250" \pm 0.0005" diameter circle, and fourteen of which are located with hole centers corresponding to the specified location of pin centers on a 1.3750" \pm 0.0005" diameter circle concentric with the 2.1250" circle.

Pin fit in gauge is such that entire length of pins will, without undue force, enter into and disengage from the gauge. Gauge is also provided with a hole 1.000" diameter minimum concentric with pin circles.

SMALL-BUTTON THIRTYFIVAR



No.of Pins	Pins	JETEC No.	RCA No.
35-Pin	l through 35	E35-28	
33-Pin	Omit pins 24 and 30	E33-29	_
31-Pin	Omit pins 24 and 30; pins 23 and 31 are trimmed to same di- mension as index pin.	E3 I-36	-
21-Pin	l through 21	E21-40	-

For other dimensions of above base, see first page of the "Thirtyfivar" series