

**TABLE B** **UNIJUNCTION TRANSISTORS** **TO-18 CASE**  
 CENTRAL SEMICONDUCTOR 61 DE 1989963 0000237 9 7-37-21

TYPE	INTRINSIC STANDOFF RATIO $\eta$		INTERBASE RESISTANCE $r_{BB}$		PEAK-POINT CURRENT $I_p$	EMITTER REV. CURRENT $I_{EB20 @ V_{B2E}}$		VALLEY-POINT CURRENT $I_v$	BASE 1 PEAK VOLTAGE $V_{OB1}$	CASE
	MIN.	MAX.	MIN.	MAX.	MAX.	MAX.		MIN.	MIN.	
			k $\Omega$	k $\Omega$	$\mu A$	$\mu A$	V	mA	V	
2N2417	0.51	0.62	4.7	6.8	12	2.0	60	8.0	—	
2N2417A	0.51	0.62	4.7	6.8	12	2.0	60	8.0	3.0	
2N2417B	0.51	0.62	4.7	6.8	6.0	0.2	30	8.0	3.0	
2N2418	0.51	0.62	6.2	9.1	12	2.0	60	8.0	—	
2N2418A	0.51	0.62	6.2	9.1	12	2.0	60	8.0	3.0	
2N2418B	0.51	0.62	6.2	9.1	6.0	0.2	30	8.0	3.0	
2N2419	0.56	0.68	4.7	6.8	12	2.0	60	8.0	—	
2N2419A	0.56	0.68	4.7	6.8	12	2.0	60	8.0	3.0	
2N2419B	0.56	0.68	4.7	6.8	6.0	0.2	30	8.0	3.0	
2N2420	0.56	0.68	6.2	9.1	12	2.0	60	8.0	—	
2N2420A	0.56	0.68	6.2	9.1	12	2.0	60	8.0	3.0	
2N2420B	0.56	0.68	6.2	9.1	6.0	0.2	30	8.0	3.0	
2N2421	0.62	0.75	4.7	6.8	12	2.0	60	8.0	—	
2N2421A	0.62	0.75	4.7	6.8	12	2.0	60	8.0	3.0	
2N2421B	0.62	0.75	4.7	6.8	6.0	0.2	30	8.0	3.0	
2N2422	0.62	0.75	6.2	9.1	12	2.0	60	8.0	—	
2N2422A	0.62	0.75	6.2	9.1	12	2.0	60	8.0	3.0	
2N2422B	0.62	0.75	6.2	9.1	6.0	0.2	30	8.0	3.0	
2N2646	0.56	0.75	4.7	9.1	5.0	12	30	4.0	3.0	
2N2647	0.68	0.82	4.7	9.1	2.0	0.2	30	8.0	6.0	
2N2840	0.62*	—	4.7	9.1	10	1.0	30	.20	—	
2N3980	0.68	0.82	4.0	8.0	2.0	0.01	30	1.0	6.0	
2N4851	0.56	0.75	4.7	9.1	2.0	0.1	30	2.0	3.0	
2N4852	0.70	0.85	4.7	9.1	2.0	0.1	30	4.0	5.0	
2N4853	0.70	0.85	4.7	9.1	0.4	0.05	30	6.0	6.0	
2N4947	0.51	0.69	4.0	9.1	2.0	0.01	30	4.0	3.0	
2N4948	0.55	0.82	4.0	12	2.0	0.01	30	2.0	6.0	
2N4949	0.74	0.86	4.0	12	1.0	0.01	30	2.0	3.0	
2N5431	0.72	0.80	6.0	8.5	0.4	0.01	30	2.0	1.0	
MU20	0.50	0.85	4.0	10	5.0	1.0	30	1.0	3.0	
MU2646M	0.56	0.75	4.7	9.1	5.0	12	30	2.0	3.0	



\*Typical Value

**TABLE C** **UNIJUNCTION TRANSISTORS** **TO-92 CASE**

TYPE	INTRINSIC STANDOFF RATIO $\eta$		INTERBASE RESISTANCE $r_{BB}$		PEAK-POINT CURRENT $I_p$	EMITTER REV. CURRENT $I_{EB20 @ V_{B2E}}$		VALLEY-POINT CURRENT $I_v$	BASE 1 PEAK VOLTAGE $V_{OB1}$	CASE
	MIN.	MAX.	MIN.	MAX.	MAX.	MAX.		MIN.	MIN.	
			k $\Omega$	k $\Omega$	$\mu A$	$\mu A$	V	mA	V	
2N4870	0.56	0.75	4.0	9.1	5.0	1.0	30	2.0	3.0	
2N4871	0.70	0.85	4.0	9.1	5.0	1.0	30	4.0	5.0	
MU10	0.50	0.85	4.0	10	5.0	1.0	30	1.0	3.0	
MU2646	0.56	0.75	4.7	9.1	5.0	12	30	4.0	3.0	
MU4891	0.55	0.82	4.0	9.1	5.0	0.01	30	2.0	3.0	
MU4892	0.51	0.69	4.0	9.1	2.0	0.01	30	2.0	3.0	
MU4893	0.55	0.82	4.0	12	2.0	0.01	30	2.0	6.0	
MU4894	0.74	0.86	4.0	12	1.0	0.01	30	2.0	3.0	



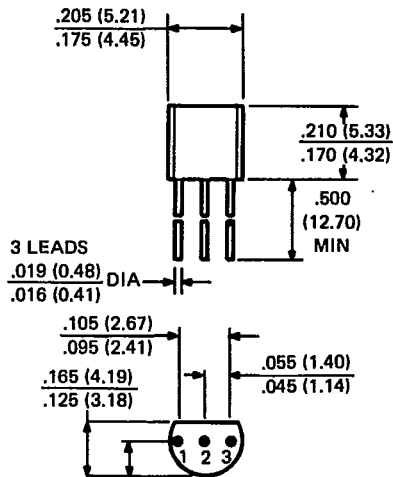
**TABLE D** **PROGRAMMABLE UNIJUNCTION TRANSISTORS** **TO-92 CASE**

TYPE	MAXIMUM RATINGS		GATE TO ANODE LEAKAGE CURRENT $I_{GAO @ 40v}$	PEAK CURRENT $I_p$		VALLEY CURRENT $I_v$		CASE
	GATE TO ANODE REVERSE VOLTAGE $V_{GAR}$	DC ANODE CURRENT $I_T$		$R_G = 10k\Omega$		$R_G = 1.0M\Omega$		
			MAX.	MAX.	MAX.	MIN.	MAX.	
	V	mA	nA	$\mu A$	$\mu A$	$\mu A$	$\mu A$	
2N6027	40	150	10	5.0	2.0	70	50	
2N6028	40	150	10	1.0	0.15	25	25	
A7T6027	40	150	10	5.0	2.0	70	50	
A7T6028	40	150	10	1.0	0.15	25	25	



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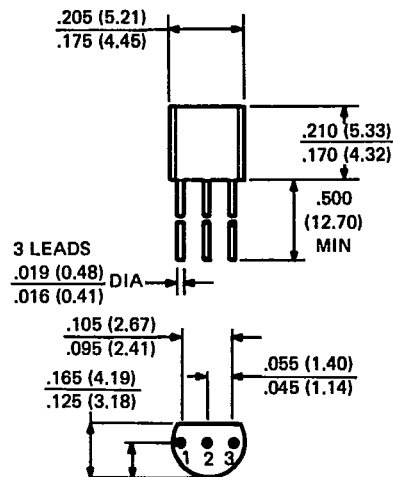
**CASE OUTLINE DRAWINGS**



**LEAD CODE:**

- 1. BASE 1
- 2. EMITTER
- 3. BASE 2

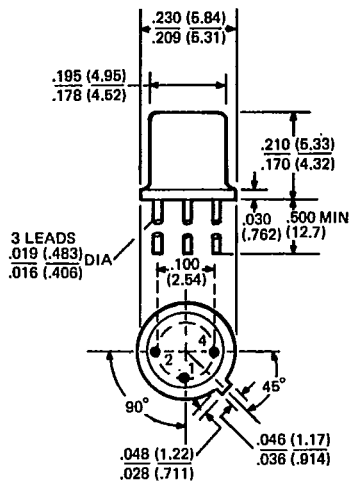
**TO-92 (UJT)**



**LEAD CODE:**

- 1. ANODE (A)
- 2. GATE (G)
- 3. CATHODE (K)

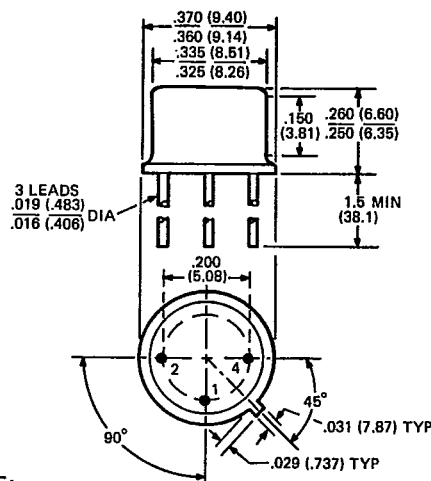
**TO-92 (PUT)**



**LEAD CODE:**

- 1. EMITTER
- 2. BASE 1
- 4. BASE 2

**TO-18\***



**LEAD CODE:**

- 1. EMITTER
- 2. BASE 1
- 4. BASE 2

**TO-5\***

DIMENSIONS IN INCHES (MILLIMETERS)

DRAWINGS NOT TO SCALE.

\*Conforms to JEDEC outline except for lead configuration.

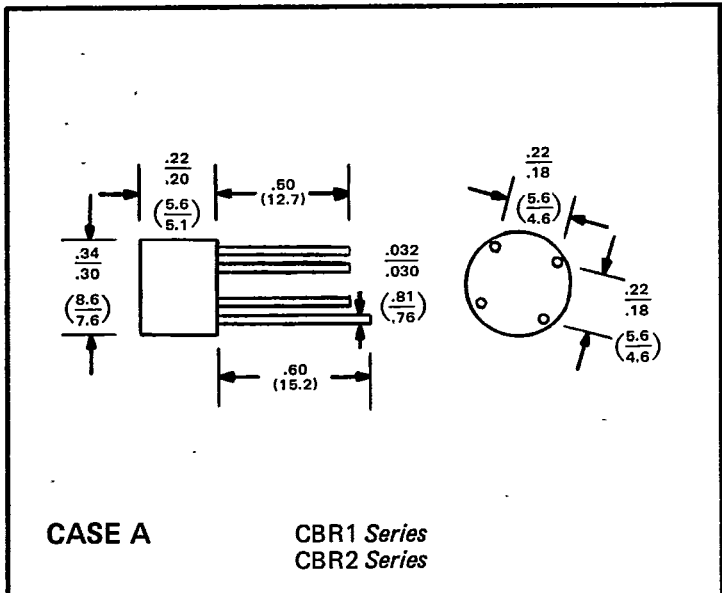


145 Adams Avenue  
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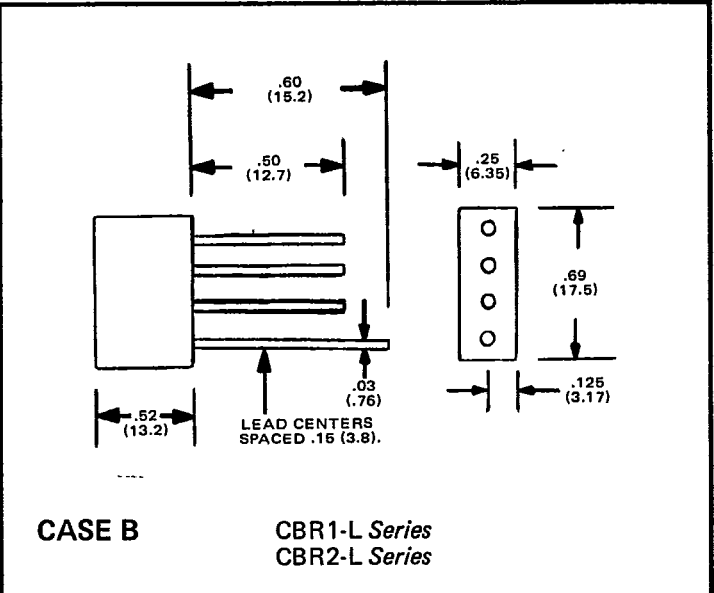
MANUFACTURERS OF DISCRETE SEMICONDUCTORS

# CASE OUTLINE DRAWINGS

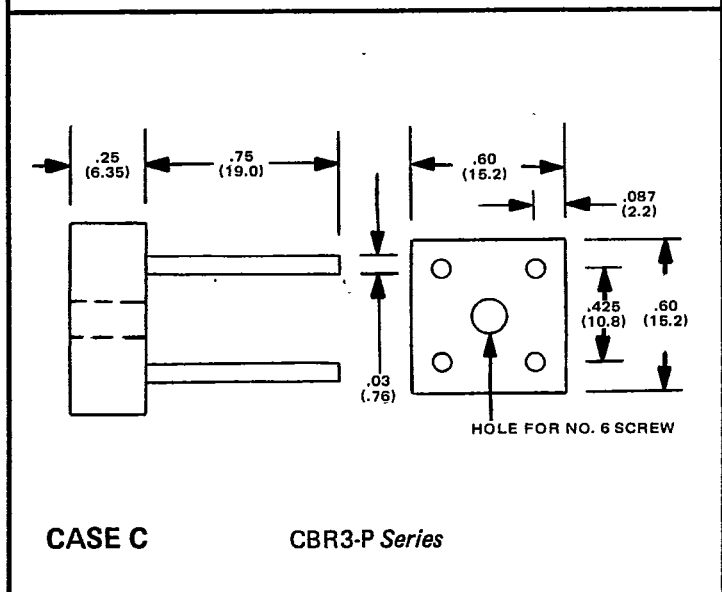
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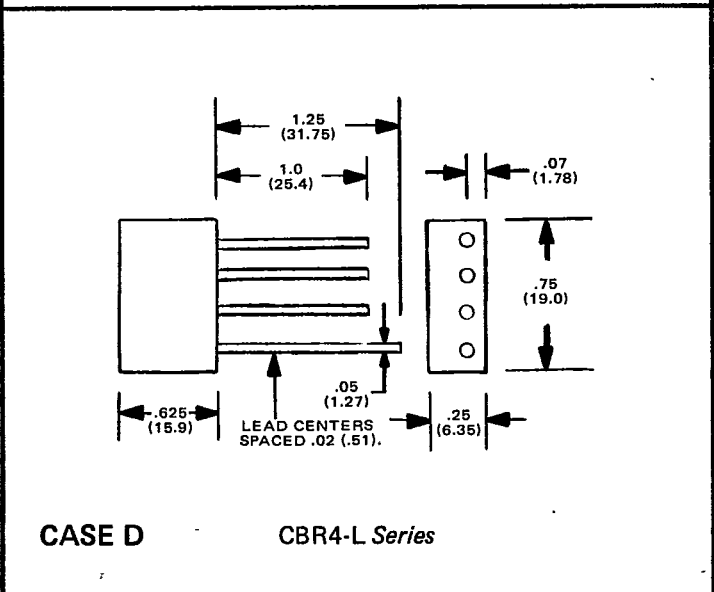
**CASE A** CBR1 Series  
CBR2 Series



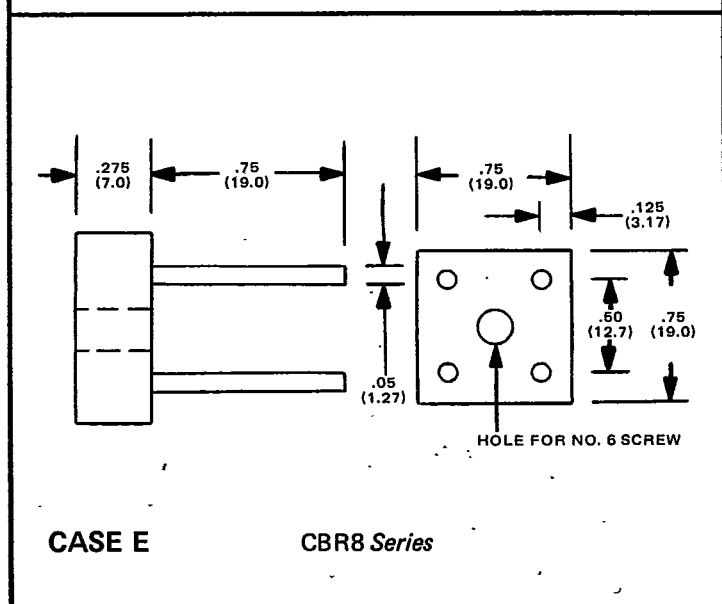
**CASE B** CBR1-L Series  
CBR2-L Series



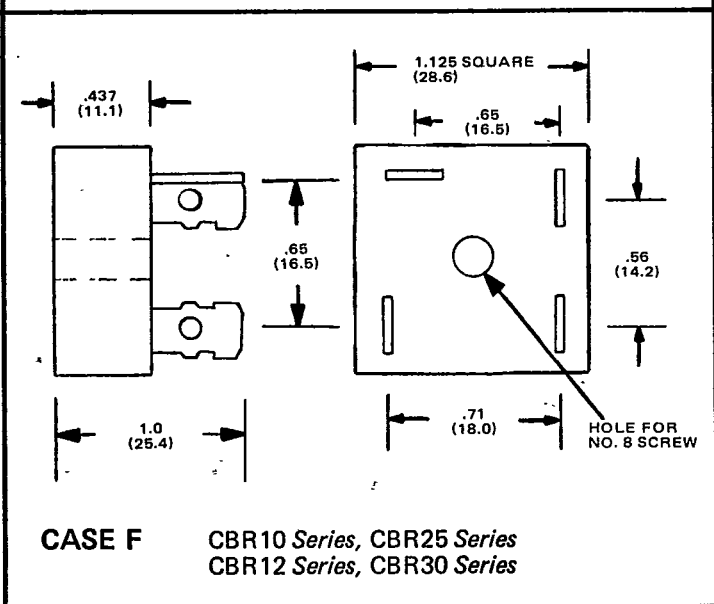
**CASE C** CBR3-P Series



**CASE D** CBR4-L Series



**CASE E** CBR8 Series



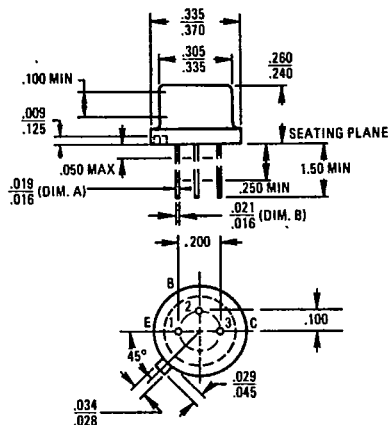
**CASE F** CBR10 Series, CBR25 Series  
CBR12 Series, CBR30 Series

All Dimensions in Inches (Millimeters)  
Drawings Not To Scale

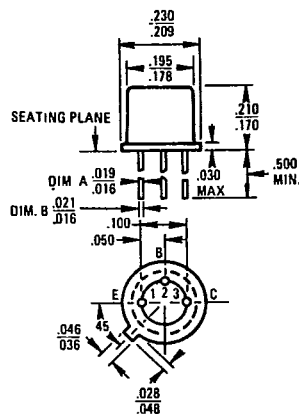
f

# MECHANICAL OUTLINE DRAWINGS

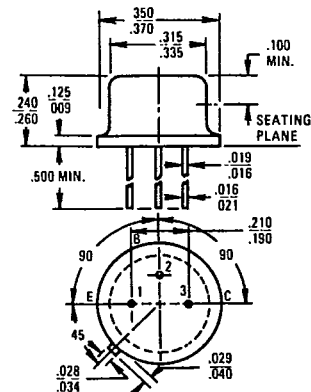
### TO-5



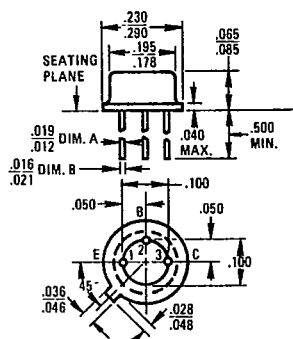
### TO-18



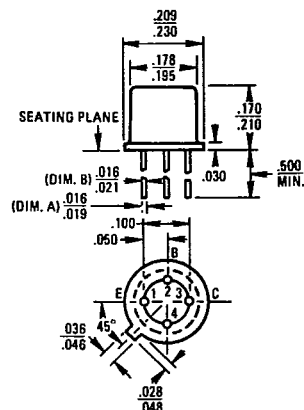
### TO-39



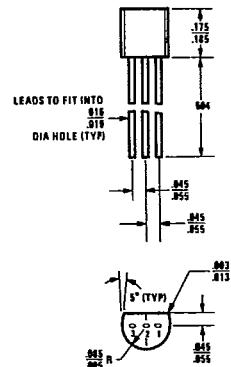
### TO-46



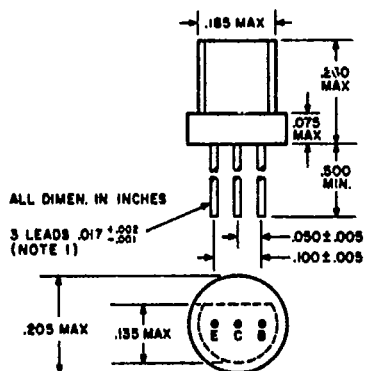
### TO-72



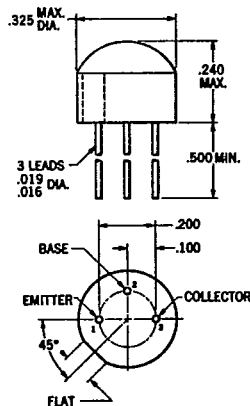
### TO-92



### TO-98



### TO-105



### TO-106

