

GERMANIUM POWER TRANSISTORS

Type Number	Case Type	V_{CBO} V	V_{CEO} V	V_{EBO} V	V_{CER} V	V_{CES} V	CURRENT GAIN				SATURATION VOLTAGES				θ_{J-C} °C/W
							Min.	h_{FE} Max.	$V_{CE} @ I_C$ V	$I_C @ I_B$ A	$V_{CE(s)}$ V	$V_{BE(s)}$ V	$I_C @ I_B$ A		
3 AMP GERMANIUM PNP															
CA2D2	MT-36	20	20	1.2			20		2.0	2.0	.60		2.0	.200	2.20
2N155	TO-3	30		15.0			24		2.0	.5	.65		1.0	.100	3.00
2N176	TO-3	40		10.0			25	90	2.0	.5					.80
2N235A	TO-3	50		15.0	40		20	80	2.0		.80		1.0	.100	1.50
2N236A	TO-3	50		15.0	35		20	80	2.0		1.00		3.0	.300	1.50
2N236B	TO-3	50		15.0	35		40	120	2.0		1.00		3.0	.300	1.50
2N242	TO-3	45		45.0			30	90	2.0	.5					3.00
2N255	TO-3	15		15.0			20	100	2.0	.5	.50		.1	.010	3.00
2N256	TO-3	30		30.0			20	100	2.0	.5	.50		.1	.101	3.00
2N268	TO-3	80		40.0			28		2.0	.5					1.50
2N285A	TO-3	25		15.0	35		38		2.0						
2N285B	TO-3	25		15.0	35		38		2.0						
2N297A	TO-3	60	50	40.0		50	40	100	2.0	.5	1.00		.2	.200	2.00
2N375	TO-3	80		40.0		60	35	90	4.0	1.0	1.00		2.0	.200	1.20
2N392	TO-3	60	40	40.0			40	200	2.0	1.0					.80
2N399	TO-3	25		15.0	35		36	40	2.0						1.50
2N538	MT-36	80	60	28.0			20	50	2.0	2.0	.60		2.0	.200	2.20
2N538A	MT-36	80	60	28.0			20	50	2.0	2.0	.60		2.0	.200	2.20
2N539	MT-36	80	55	28.0			30	75	2.0	2.0	.60		2.0	.200	2.20
2N539A	MT-36	80	55	28.0			30	75	2.0	2.0	.60		2.0	.200	2.20
2N540	MT-36	80	55	28.0			45	113	2.0	2.0	.60		2.0	.200	2.20
2N540A	MT-36	80	55	28.0			45	113	2.0	2.0	.60		2.0	.200	2.20
2N554	TO-3	40		10.0	30		25		2.0		.60		3.0	.300	1.00
2N555	TO-3	30		15.0		30	20		2.0	.5	.40		.3	.300	1.00
2N618	TO-3	80		40.0		60	60	140	4.0	1.0	.80		2.0	.200	1.20
2N1359	TO-3	50		25.0		40	35	90	4.0	1.0	1.00		2.0	.200	.80
2N1360	TO-3	50		25.0		40	60	150	4.0	1.0	1.00		2.0	.200	.80
2N1362	TO-3	100		50.0		75	35	90	4.0	1.0	1.00		2.0	.200	.80
2N1363	TO-3	100		50.0		75	60	140	4.0	1.0	1.00		2.0	.200	.80
2N1364	TO-3	120		60.0		100	35	90	4.0	1.0	1.00		2.0	.200	.80
2N1365	TO-3	120		60.0		100	40	100	4.0	1.0	1.00		2.0	.200	.80
2N1501	MT-36	60	40	28.0			25	100	2.0	2.0	.60		2.0	.200	2.20
2N1502	MT-36	40	40	28.0			25	100	2.0	2.0	.60		2.0	.200	2.20

Type Number	Case Type	$V_{CEO(max)}$ V	V_{EBO} V	h_{FE} @ I_C/V_{CE} (Min-Max @ A/V)	$V_{CE(sat)}$ @ I_C/I_B (V@A/A)	V_{BE} @ I_C/V_{CE} (V@A/V)	I_{CEV} @ V_{CE} (mA@V)	$P_D @$ $T_C = 25^\circ C$ (watts)	θ_{JC} (°C/W)	$T_J(max)$ (°C)	f_T (KHz)
3 AMP GERMANIUM PNP											
2N1038	TO-5	30	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@40	20	3.75	100	225
2N1039	TO-5	40	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@60	20	3.75	100	225
2N1040	TO-5	50	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@80	20	3.75	100	225
2N1041	TO-5	60	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@100	20	3.75	100	225
2N2564	TO-5	30	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@40	20	3.75	100	250
2N2565	TO-5	40	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@60	20	3.75	100	250
2N2566	TO-5	50	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@80	20	3.75	100	250
2N2567	TO-5	60	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@100	20	3.75	100	250
2N2659	TO-5	30	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@50	15	5.0	100	280
2N2660	TO-5	40	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@70	15	5.0	100	280
2N2661	TO-5	50	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@90	15	5.0	100	280
2N2665	TO-5	30	20	50-150@.5/.5	.25@.5/.025	.6@.5/.5	.6@50	15	5.0	100	300
2N2666	TO-5	40	20	50-150@.5/.5	.25@.5/.025	.6@.5/.5	.6@70	15	5.0	100	300
2N2667	TO-5	50	20	50-150@.5/.5	.25@.5/.025	.6@.5/.5	.6@90	15	5.0	100	300
2N2552	MT-27	30	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@40	20	3.75	100	225
2N2553	MT-27	40	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@60	20	3.75	100	225
2N2554	MT-27	50	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@80	20	3.75	100	225
2N2555	MT-27	60	20	20-60@1/.5	.25@1/.1	1@1/.5	.65@100	20	3.75	100	225
2N2560	MT-27	30	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@40	20	3.75	100	250
2N2561	MT-27	40	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@60	20	3.75	100	250
2N2562	MT-27	50	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@80	20	3.75	100	250
2N2563	MT-27	60	20	20-60@3/1	.75@3/.3	1.5@3/1	.65@100	20	3.75	100	250
2N2662	MT-27	30	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@50	15	5.0	100	280
2N2663	MT-27	40	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@70	15	5.0	100	280
2N2664	MT-27	50	20	30-90@.5/.5	.2@.5/.05	.6@.5/.5	.6@90	15	5.0	100	280

CASE OUTLINE DRAWINGS & DIMENSIONS

Technical drawing of a mechanical part showing front and top views with dimensions.

Front View Dimensions:

- Top width: .335
- Second width from top: .370
- Third width from top: .205
- Fourth width from top: .335
- Right side height: .260
- Right side height (lower section): .240
- Left side height: .009
- Left side height (lower section): .125
- Bottom width: .019
- Bottom width (lower section): .016
- Bottom height: 1.50 MIN

Top View Dimensions:

- Top width: .200
- Right side width: .100
- Bottom width: .034
- Bottom width (lower section): .028
- Right side width (lower section): .029
- Right side width (lower section): .045
- Angle: 45°

[illegible]

Technical drawing of a 1/2-20 UNF-2A plug-in connector. The drawing shows a side view of the connector with various dimensions and labels. Key dimensions include: .100±.010 for the top flange thickness, .200±.010 for the top flange outer diameter, .437 for the top flange inner diameter, .510 MAX for the top flange height, .1500 MIN for the main body height, .025±.003 for the pin diameter, .445±.010 for the main body outer diameter, .850 MAX for the main body height, .035 MAX for the pin spacing, and .335 for the pin length. Labels include C, B, E, and 1/2-20 UNF-2A.

Technical drawing of a hex head bolt. The drawing includes a side view at the top and an end view at the bottom. Dimensions and callouts are as follows:

- Side View Dimensions:**
 - UNDERCUT 1.0" $.093 \pm .010$
 - Hex head height: $.500 \pm .015$ MAX.
 - Thread length: 1.500 MIN.
 - Thread pitch: 1/2-20 UNF 2A
 - Thread diameter: $.025 \pm .003$
 - Hex head outer diameter: $1.00 \pm .010$
- End View Dimensions:**
 - Hex head outer diameter: $.875$ MAX.
 - Hex head width across flats: $.750 \pm .010$
 - Thread relief diameter: $.200 \pm .010$
 - Thread diameter: $.100 \pm .010$
 - Callouts A, B, and C point to specific features on the end view.
- Notes:**
 - NOTE 1: THREAD RELIEF IS .080 MAX. BY .430 DIA. NOMINAL.

[illegible]

CASE OUTLINE DRAWINGS & DIMENSIONS

[illegible]

Technical drawing of a mechanical part, likely a bracket or base plate, showing top and side views with dimensions in inches.

Top View Dimensions:

- Overall width: 6.20 MAX
- Slot width: .570
- Slot depth: .360 MIN
- Slot position from left edge: .470, .500
- Slot position from right edge: .250, .340
- Slot depth from top edge: .028, .034
- Slot depth from bottom edge: .958, .962
- Slot depth from centerline: .590
- Slot depth from bottom edge: .145 R MAX
- Slot depth from bottom edge: .142, .152
- Slot depth from bottom edge: .350 R MAX
- Slot depth from bottom edge: .190, .093
- Slot depth from bottom edge: .210, .107

Side View Dimensions:

- Overall height: .050 MAX
- Slot depth: .050, .075

[illegible]

Technical drawing of a 1N4148 diode. The top view shows a hexagonal base with a diameter of .58. The base has a thickness of .02. The collector and emitter are located on the base, with a distance of .29 between them. The emitter is labeled "EMITTER" and the collector is labeled "COLLECTOR". The base is labeled "BASE". The side view shows the diode's profile with a total height of .75. The top of the diode has a diameter of .25. The base has a diameter of .25. The diode has a length of .53. The diode is labeled "HEX NUT" and "1-1/4 - 16UN - 2A". The diode is shown with a .09 DIA. (3) hole.

The drawing shows a 2N4350 JFET with the following dimensions:

- Side View Dimensions:**
 - Gate lead thread: 3/8-24UNF-2A
 - Gate lead diameter: .093
 - Gate lead height: .82
 - Drain lead diameter: .09 DIA. (3)
 - Drain lead height: .72
 - Source lead diameter: 1.26 DIA.
 - Source lead height: .53
- Top View Dimensions:**
 - Emitter diameter: .02
 - Collector diameter: .29
 - Base diameter: .58

SEATING PLANE

.275
.500

.100
.312

1.25
MAX.

.040
.095

.1658
.1697

.375
.500

.610
.710

.090
.140

.335
.395

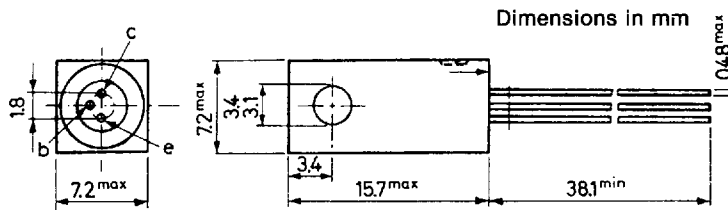
90°

.090
MIN.

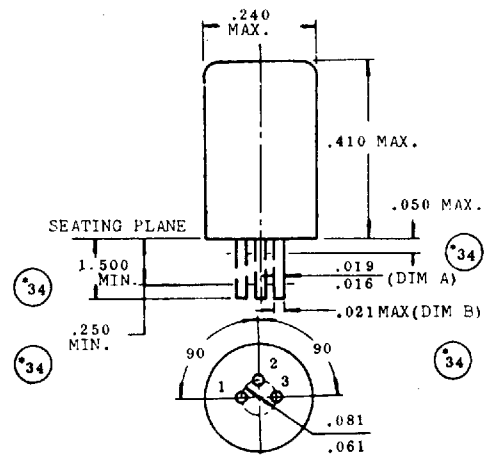
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CASE OUTLINE DRAWINGS & DIMENSIONS

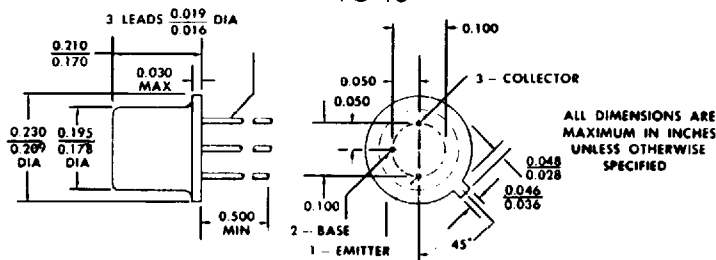
NS257



TO-1



TO-18



THE COLLECTOR IS ELECTRICAL CONTACT WITH THE CASE.

ALL JEDEC TO-18 DIMENSIONS AND NOTES ARE APPLICABLE.



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