

GERMANIUM POWER TRANSISTORS

Type Number	Case Type	V_{CRO} 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	A	$V_{CE(1)}$ V	$V_{BE(1)}$ V	$I_C @ I_B$ A	A	

6 AMP GERMANIUM PNP (Cont.)

2N1137B	TO-3	100	65	15.0	75		75	150	5.0	3.0	1.0		3.0	.300	1.20
2N1138	TO-3	60	25	15.0	35		100	200	5.0	3.0	1.0		3.0	.300	1.20
2N1138A	TO-3	90	55	15.0	65		100	200	5.0	3.0	1.0		3.0	.300	1.20
2N1138B	TO-3	100	65	15.0	75		100	200	5.0	3.0	1.0		3.0	.300	1.20

7 AMP GERMANIUM PNP

2N250A	TO-3	40		20.0			25	100	1.5	3.0	.70	1.00	3.0	.150	.80
2N251A	TO-3	60		20.0			25	100	1.5	3.0	.70	1.00	3.0	.150	.80
2N456	TO-3	40		20.0			10		1.5	5.0	.50		5.0	.500	.50
2N456A	TO-3	40	20	20.0			30	90	1.5	5.0	.50		5.0	.500	.50
2N456B	TO-3	40		30.0		50	30	90	1.5	5.0	.50		5.0	.500	.50
2N457	TO-3	60		20.0			10		1.5	5.0	.50		5.0	.500	.50
2N457A	TO-3	60	30	20.0			30	90	1.5	5.0	.50		5.0	.500	.50
2N457B	TO-3	60		30.0		60	30	90	1.5	5.0	.50		5.0	.500	.50
2N458	TO-3	80		20.0			10		1.5	5.0	.50		5.0	.500	.50
2N458A	TO-3	80	40	20.0			30	90	1.5	5.0	.50		5.0	.500	.50
2N458B	TO-3	80		30.0		65	30	90	1.5	5.0	.50		5.0	.500	.50
2N637	TO-3	60		15.0	35		30	60	5.0	3.0	.80		3.0	.300	1.50
2N637A	TO-3	90		15.0	65		30	60	5.0	3.0	.80		3.0	.300	1.50
2N637B	TO-3	100		15.0	75		30	60	5.0	3.0	.80		3.0	.300	1.50
2N638	TO-3	60		15.0	35		20	40	5.0	3.0	.15		3.0	.300	2.00
2N638A	TO-3	90		15.0	65		20	40	5.0	3.0	.15		3.0	.300	2.00
2N638B	TO-3	100		15.0	75		20	40	5.0	3.0	.15		3.0	.300	2.00
2N1021	TO-3	100		20.0		100	30	90	1.5	5.0	.50		5.0	.500	.50
2N1021A	TO-3	100	50	30.0		70	30	90	1.5	5.0	.50		5.0	.500	.50
2N1022	TO-3	120		20.0		120	30	90	1.5	5.0	.50		5.0	.500	.50
2N1022A	TO-3	120	55	30.0		75	30	90	2.0	5.0	.50		5.0	.500	.50
2N1160	TO-3	80	60	20.0			20	50	2.0	5.0	1.00		5.0	.500	1.20
2N3611	TO-3	40		20.0			30	35	70	2.0	.25		3.0	.300	.90
2N3612	TO-3	60		30.0			45	35	70	2.0	.25		3.0	.300	.90
2N3613	TO-3	40		20.0			30	60	120	2.0	.25		3.0	.300	.90
2N3614	TO-3	60		30.0		45	60	120	2.0	3.0	.25		3.0	.300	.90
2N3615	TO-3	80		40.0		60	30	60	2.0	3.0	.25		3.0	.300	.90
2N3616	TO-3	100		50.0		75	30	60	2.0	3.0	.25		3.0	.300	.90
2N3617	TO-3	80		40.0		60	45	90	2.0	3.0	.25		3.0	.300	.90
2N3618	TO-3	100		50.0		75	45	90	2.0	3.0	.25		3.0	.300	.90

Type Number	Case Type	$V_{CRO(max)}$ V	V_{EBO} V	h_{FE} @ I_C/V_{CE} (Min-Max @A/V)	$V_{CE(max)}$ @ 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)
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7 AMP GERMANIUM PNP

2N5887	TO-66	15	20	20-350@.5/2	.4@7/1.4	1.2@7/2	5@20	57	1.5	110	250
2N5888	TO-66	25	20	15-350@.5/2	.4@7/1.4	1.2@7/2	5@30	57	1.5	110	250
2N5889	TO-66	25	20	30-70@.5/2	.4@7/1.4	1.2@7/2	5@30	57	1.5	110	250
2N5890	TO-66	35	20	30-70@.5/2	.4@7/1.4	1.2@7/2	5@45	57	1.5	110	250
2N5891	TO-66	45	20	30-70@.5/2	.4@7/1.4	1.2@7/2	5@60	57	1.5	110	250
2N5892	TO-66	60	20	30-70@.5/2	.4@7/1.4	1.2@7/2	5@75	57	1.5	110	250
2N5893	TO-66	25	0	60-120@.5/2	.4@7/1.4	1.2@7/2	5@30	57	1.5	110	250
2N5894	TO-66	35	20	60-120@.5/2	.4@7/1.4	1.2@7/2	5@45	57	1.5	110	250
2N5895	TO-66	45	20	60-120@.5/2	.4@7/1.4	1.2@7/2	5@60	57	1.5	110	250
2N5896	TO-66	60	20	60-120@.5/2	.4@7/1.4	1.2@7/2	5@75	57	1.5	110	250
2N5897	TO-66	25	20	100-200@.5/2	.4@7/1.4	1.2@7/2	5@30	57	1.5	110	250
2N5898	TO-66	35	20	100-200@.5/2	.4@7/1.4	1.2@7/2	5@45	57	1.5	110	250
2N5899	TO-66	45	20	100-200@.5/2	.4@7/1.4	1.2@7/2	5@60	57	1.5	110	250
2N5900	TO-66	60	20	100-200@.5/2	.4@7/1.4	1.2@7/2	5@75	57	1.5	110	250
2N5901	TO-66	25	20	175-350@.5/2	.4@7/1.4	1.2@7/2	5@30	57	1.5	110	250

Type Number	Case Type	V_{CRO} V	V_{CEO} V	V_{EBO} V	V_{CER} V	V_{CES} V	Min.	h_{FE}	Max.	$V_{CE} @ I_C$ V A	$V_{CE(1)}$ V	$V_{BE(1)}$ V	$I_C @ I_B$ A A	θ_{J-C} °C/W
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10 AMP GERMANIUM PNP

DA3F3	MT-7	60	35				25	9	22	2.0	10.0	.20	1.0	2.000	.40
2N574	MT-7	60	55				55	9	22	2.0	10.0	.20	1.0	2.000	.40
2N574A	MT-7	80	60				70	9	22	2.0	10.0	.20	1.0	2.000	.40
2N627	TO-3	40		20.0			30	10	30	2.0	10.0	1.00	10.0	1.000	.80
2N628	TO-3	60		30.0			45	10	30	2.0	10.0	1.00	10.0	1.000	.80

CASE OUTLINE DRAWINGS & DIMENSIONS

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

Front View Dimensions:

- Top flange width: .335
- Top flange thickness: .370
- Top flange inner width: .205
- Top flange outer width: .335
- Top flange height: .260
- Top flange base height: .240
- Top flange base width: .150 MIN
- Top flange base thickness: .008
- Top flange base width: .125
- Top flange base height: .019
- Top flange base width: .016

Top View Dimensions:

- Top flange width: .200
- Top flange height: .100
- Top flange inner width: .029
- Top flange outer width: .045
- Top flange base width: .034
- Top flange base height: .028
- Top flange base angle: 45°

Technical drawing of a 3-lead chip carrier. The top view shows a circular body with a diameter of .650. Three leads extend from the bottom, with a distance of .146 between the center of each lead and the center of the body. The leads have a thickness of .115 MAX. The side view shows a height of .033 for the body and .027 for the leads. The leads are spaced .444 apart. The drawing includes a 90° angle dimension and a .330/.270 dimension for the lead height.

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" $\pm .093 \pm .010$
 - 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 width: $1.00 \pm .010$
- End View Dimensions:**
 - Hex head width: $.875$ MAX.
 - Hex head width: $.750 \pm .010$
 - Hex head width: $.200 \pm .010$
 - Hex head width: $.100 \pm .010$
- Callouts:**
 - A: Hex head
 - B: Thread
 - C: Thread relief
 - E: Undercut
- NOTE 1:**

THREAD RELIEF IS .090 MAX.
BY .430 DIA. NOMINAL

Technical drawing of a mechanical part with dimensions and feature callouts:

- Top View:**
 - Overall width: $.875$ MAX
 - Top flange width: $.450$
 - Top flange thickness: $.250$
 - Seating Plane: Indicated by a horizontal line.
 - Bottom flange thickness: $.062$ / $.058$
 - Bottom flange width: $.312$ MIN
- Front View:**
 - Overall height: 1.197
 - Top flange height: $.177$
 - Top flange width: $.675$ / $.655$
 - Top flange thickness: $.188$ MAX BOTH ENDS
 - Top flange width at ends: $.161$ / $.151$
 - Top flange thickness at ends: $.440$ / $.420$
 - Top flange width at ends: $.225$ / $.205$
 - Top flange thickness at ends: $.525$ R MAX

Technical drawing of a transistor package showing side and top views with dimensions.

Side View Dimensions:

- Overall width: 1.250 DIA MAX.
- Base width: 1.005 DIA MAX.
- Base thickness: .210 MAX.
- Emitter thickness: .360 MAX.
- Lead thickness: .500 MAX.
- Lead width: .375 MAX.
- Lead height: .312 MAX.
- Lead diameter: .210 MAX.
- Lead pitch: .610 MAX.
- Lead thread: 10-32 UNF-2A
- Lead diameter: .137 MAX.
- Lead diameter: .123 MAX.

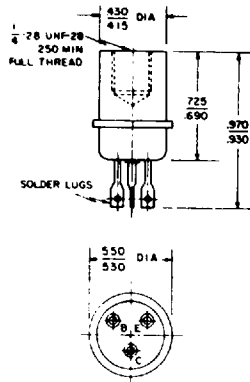
Top View Dimensions:

- Base diameter: .140 DIA. MAX.
- Base radius: .345 R
- Emitter diameter: .140 DIA. MAX.

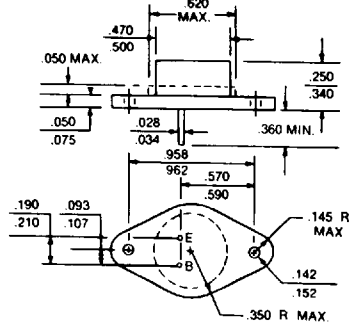
GERMANIUM POWER TRANSISTORS

CASE OUTLINE DRAWINGS & DIMENSIONS

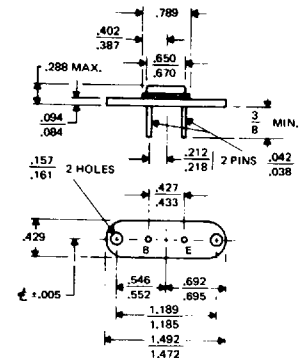
TO-13



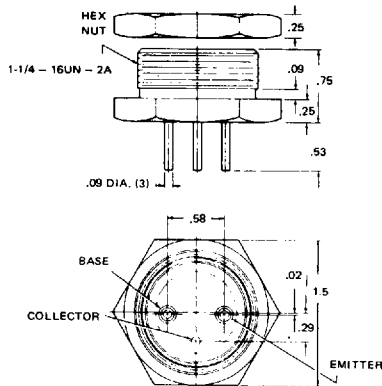
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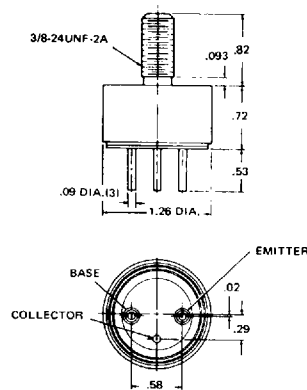
MS-7



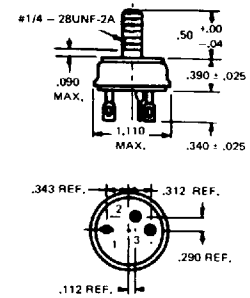
MT-22



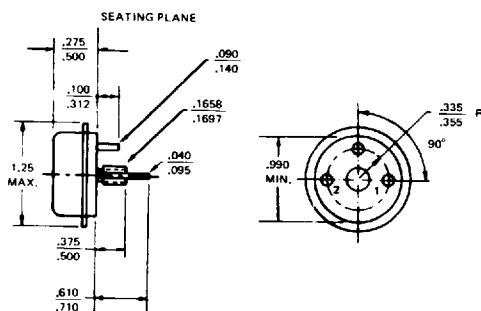
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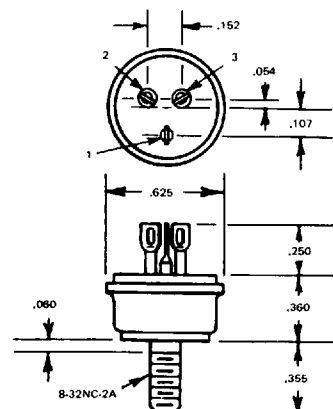
MT-7



TO-68



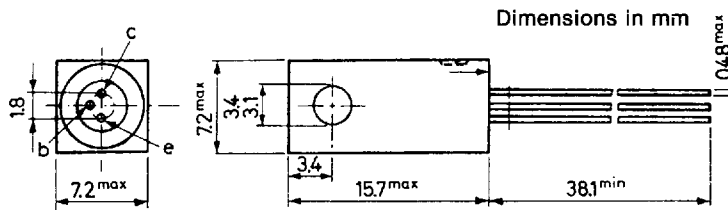
MT-36



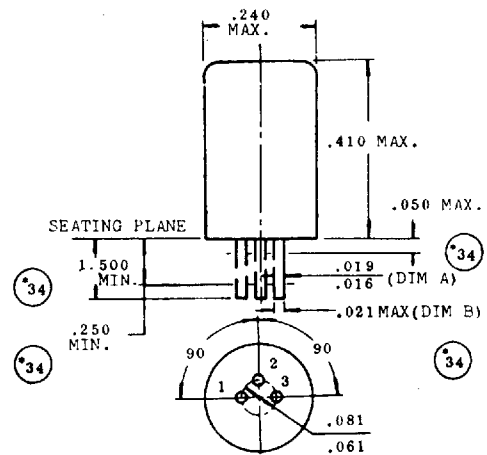
GERMANIUM POWER TRANSISTORS

CASE OUTLINE DRAWINGS & DIMENSIONS

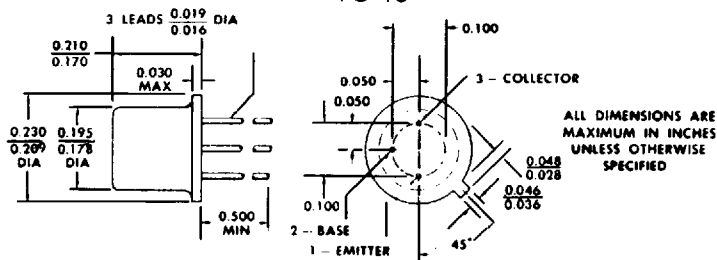
NS257



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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