



semitron hot line

TOLL FREE NUMBER 800-777-3960

alloy-junction germanium transistors

Transistor Type	Polarity	Maximum Power (W)	Maximum VCB	Maximum (V) VCE	Typical Gain HFE	Frequency Resp. (MHz)	Case
2N43A	PNP	.240	45	30R	40	1.30	TO-5
2N44A	PNP	.240	45	30R	30	1.00	TO-5
2N107	PNP	.050	12	6	30	.30	TO-5
2N167A	NPN	.075	30	30	50	5.00	TO-5
2N169	NPN	.065	15	15R	48	8.00	TO-5
2N169A	NPN	.065	25	25R	84	9.00	TO-5
2N170	NPN	.025	10	9R	30	4.00	TO-5
2N187A	PNP	.200	25	25R	36	1.00	TO-5
2N188A	PNP	.200	25	25R	50	1.20	TO-5
2N189	PNP	.075	25	25R	36	.80	TO-5
2N190	PNP	.075	25	25R	50	1.00	TO-5
2N191	PNP	.075	25	25R	80	1.20	TO-5
2N192	PNP	.975	25	25R	114	1.50	TO-5
2N211A	PNP	.200	25	25R	80	1.30	TO-5
2N292	NPN	.065	15	15R	21	5.00	TO-5
2N293	NPN	.065	15	15R	38	4.00	TO-5
2N319	PNP	.225	25	20R	34	2.00	TO-5
2N320	PNP	.225	25	20R	60	2.50	TO-5
2N321	PNP	.225	25	20R	80	3.00	TO-5
2N322	PNP	.200	18	18R	50	1.00	TO-5
2N323	PNP	.200	18	18R	80	1.50	TO-5
2N324	PNP	.140	18	18R	130	1.50	TO-5
2N331	PNP	.200	30		60	.40	TO-5
2N381	PNP	.225	50	25R	40	3.00	TO-5
2N382	PNP	.225	50	25R	90	4.00	TO-5
2N383	PNP	.225	50	25R	100	5.00	TO-5
2N388	NPN	.150	25	20	120	5.00	TO-5
2N388A	NPN	.200	40		120	8.00	TO-5
2N394A	PNP	.150	30	10	44	4.00	TO-5
2N395	PNP	.150	30	20R	60	3.00	TO-5
2N396	PNP	.150	20	20R	70	5.00	TO-5
2N396A	PNP	.200	30	20	70	8.00	TO-5
2N397	PNP	.200	30	15R	100	10.00	TO-5
2N398	PNP	.050	105	105S	40	.50	TO-5
2N398A	PNP	.150	105	105S	40	.50	TO-5
2N404	PNP	.150	25	24	40	12.00	TO-5
2N404A	PNP	.150	40	35	50	12.00	TO-5
2N413	PNP	.150	30	18	40	3.00	TO-5
2N41A	PNP	.150	30	15	60	7.00	TO-5
2N426	PNP	.150	30	18	25	6.00	TO-5
2N427	PNP	.150	30	15	25	11.00	TO-5
2N428	PNP	.150	30	12	30	17.00	TO-5
2N460	PNP	.200	45	35	26	1.20	TO-5
2N461	PNP	.200	45	35R	100	2.00	TO-5
2N464	PNP	.150	40	40	26	7.00	TO-5
2N465	PNP	.150	40	30	30	8.00	TO-5
2N466	PNP	.150	35	20	70	1.00	TO-5
2N467	PNP	.200	35	15	140	1.20	TO-5
2N508	PNP	.200	18	16	120	4.50	TO-5
2N508A	PNP	.200	30	30	120	4.50	TO-5
2N524	PNP	.225	45	30R	30	2.50	TO-5
2N525	PNP	.225	45	30R	44	3.00	TO-5
2N526	PNP	.225	45	30R	64	3.50	TO-5
2N527	PNP	.225	45	30	80	4.00	TO-5
2N650	PNP	.200	45	30	50	1.50	TO-5
2N650A	PNP	.200	45	30	50	.75	TO-5
2N651	PNP	.200	45	30	80	2.00	TO-5
2N651A	PNP	.200	45	30	76	1.00	TO-5
2N652	PNP	.200	45	30	120	2.50	TO-5
2N652A	PNP	.200	45	30	120	1.25	TO-5
2N653	PNP	.200	30	20	44	1.50	TO-5
2N654	PNP	.200	30	25	90	2.50	TO-5
2N655	PNP	.200	30	25R	140	2.50	TO-5
2N660	PNP	.200	30	14	100	15.00	TO-5
2N681	PNP	.200	30	9	120	20.00	TO-5
2N662	PNP	.200	30	14	70	8.00	TO-5
2N1008	PNP	.165	20	15R	90	.02	TO-5
2N1008A	PNP	.165	40	35R	100	.02	TO-5
2N1008B	PNP	.165	60	55R	90	.02	TO-5
2N1057	PNP	.240	45		60	.50	TO-5

Transistor Type	Polarity	Maximum Power (W)	Maximum VCB	Maximum (V) VCE	Typical Gain HFE	Frequency Resp. (MHz)	Case
2N1086	NPN	.065	9	9	120	5.00	TO-5
2N1086A	NPN	.065	9	9	120	5.00	TO-5
2N1087	NPN	.065	9	9	120	5.00	TO-5
2N1087	PNP	.200	18	18	60	1.00	TO-5
2N1088	PNP	.200	18	17	50	1.00	TO-5
2N1175	PNP	.200	35	25R	90	1.50	TO-5
2N1175A	PNP	.200	35	25R	90	1.50	TO-5
2N1185	PNP	.200	45	30R	170	1.75	TO-5
2N1186	PNP	.200	60	45R	44	.75	TO-5
2N1187	PNP	.200	60	45R	75	1.00	TO-5
2N1188	PNP	.200	60	45R	115	1.25	TO-5
2N1189	PNP	.200	45	30R	90	1.75	TO-5
2N1190	PNP	.200	45	30R	136	2.25	TO-5
2N1191	PNP	.200	40	25R	60	1.50	TO-5
2N1192	PNP	.200	40	25R	74	2.00	TO-5
2N1193	PNP	.200	40	25R	145	2.50	TO-5
2N1194	PNP	.200	40	25R	275	3.00	TO-5
2N1273	PNP	.150	15	15	100	1.00	TO-5
2N1274	PNP	.150	25	25	100	1.75	TO-5
2N1302	NPN	.150	25	25	60	3.00	TO-5
2N1303	PNP	.150	25	25	60	3.00	TO-5
2N1304	NPN	.150	25	25	70	5.00	TO-5
2N1305	PNP	.150	25	25	70	5.00	TO-5
2N1306	NPN	.150	25	25	100	10.00	TO-5
2N1307	PNP	.150	25	25	100	10.00	TO-5
2N1308	NPN	.150	25	25	150	15.00	TO-5
2N1309	PNP	.150	25	25	150	15.00	TO-5
2N1310	NPN	.120	90		42	2.40	TO-5
2N1311	NPN	.120	75		38	2.20	TO-5
2N1312	NPN	.120	50		46	2.60	TO-5
2N1372	PNP	.250	25	25	60	.75	TO-5
2N1373	PNP	.250	45	45	60	.75	TO-5
2N1374	PNP	.250	25	25	90	1.00	TO-5
2N1375	PNP	.250	45	45	90	1.00	TO-5
2N1376	PNP	.250	25	25	100	1.00	TO-5
2N1377	PNP	.250	45	45	100	1.00	TO-5
2N1378	PNP	.250	12	12	200	1.50	TO-5
2N1379	PNP	.250	25	25	200	1.50	TO-5
2N1380	PNP	.250	12	12	100	1.50	TO-5
2N1381	PNP	.250	25	25	100	1.50	TO-5
2N1382	PNP	.250	25	25	90	2.00	TO-5
2N1383	PNP	.200	25	25	72	1.50	TO-5
2N1404	PNP	.200	25	25	60	4.00	TO-5
2N1406	PNP	.150	50	50S	20	AUD	TO-5
2N1413	PNP	.200	35	25R	36	.80	TO-5
2N1414	PNP	.200	35	25	52	1.00	TO-5
2N1415	PNP	.200	35	25	72	1.30	TO-5
2N1605	NPN	.150	25	24	70	4.00	TO-5
2N1614	PNP	.240	65	40R	30	1.50	TO-5
2N1705	PNP	.200	18	12R	110	4.00	TO-5
2N1706	PNP	.200	25	18R	90	3.00	TO-5
2N1707	PNP	.200	30	25R	90	3.00	TO-5
2N1808	NPN	.150	25	25	120	4.00	TO-5
2N1924	PNP	.225	60	40R	50	1.00	TO-5
2N1925	PNP	.225	60	40R	70	1.30	TO-5
2N1926	PNP	.225	60	40R	96	1.50	TO-5
2N1997	PNP	.250	45	40	120	3.00	TO-5
2N1999	PNP	.250	35	35	150	5.00	TO-5
2N1999	PNP	.250	30	20	220	8.00	TO-5
2N2000	NPN	.300	50	20	160	2.00	TO-5
2N2001	NPN	.300	30	20	200	6.00	TO-5
2N2042	PNP	.200	105	105S	40	.50	TO-5
2N2043	PNP	.200	105	105S	90	.75	TO-5
2N2171	PNP	.225	50	25R	180	7.50	TO-5
2N3427	PNP	.200	45	30R	210	4.00	TO-5
2N3428	PNP	.200	45	30R	260	5.00	TO-5

case outline drawings

<p>TO1</p>	<p>TO3</p>	<p>TO5</p>	<p>TO18</p>																																																															
<p>TO33</p>	<p>TO36</p>	<p>TO39</p>	<p>TO46</p>																																																															
<p>TO59</p>	<p>TO61</p>	<p>TO63</p>	<p>TO65</p>																																																															
<p>TO72</p>	<p>TO82</p>																																																																	
<p>F8</p>	<p>Y220/TO220</p> <p>FIG. 79* AXIAL (NOTE 2)</p> <p>FIG. 78* PERIPHERAL (NOTE 2)</p> <p>SECTION M-X</p> <p>NOTES:</p> <ol style="list-style-type: none"> 1. Refer to rules for dimensioning semiconductor product outlines included in Publication No. 24. 2. Figure 78* Axial Terminal Configuration applicable. 3. Figure 79* Peripheral Terminal Configuration applicable. 4. Alternative lead configurations allowed within C and S. 5. Two contour options within R and P. 6. Standard option. 7. Position of lead to be measured .050 ±.005 below seating plane. 8. Position of lead to be measured .050 ±.005 below top of dimension L. <table border="1"> <thead> <tr> <th>TERMINAL</th> <th>1</th> <th>2</th> <th>3</th> <th>4</th> <th>5</th> <th>6</th> <th>7</th> <th>8</th> <th>9</th> <th>10</th> <th>11</th> <th>12</th> <th>13</th> <th>14</th> <th>15</th> <th>16</th> <th>17</th> <th>18</th> <th>19</th> <th>20</th> </tr> </thead> <tbody> <tr> <td>AXIAL</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>PERIPHERAL</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> </tbody> </table>			TERMINAL	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	AXIAL																					PERIPHERAL																				
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