

date 1963

# DELCO RADIO

## POWER SEMICONDUCTORS

### TRANSISTORS

Type	I <sub>c</sub> Max Amps	V <sub>CEO</sub> @ I <sub>c</sub> Volts @ Amps	V <sub>CEO</sub> @ I <sub>CEO</sub> Volts @ ma	h <sub>FE</sub> @ I <sub>c</sub> Amps	V <sub>EB0</sub> @ I <sub>EB0</sub> Volts @ ma	V <sub>CE(sat)</sub> @ I <sub>c</sub> Volts @ Amps	V <sub>BE</sub> Volts	f <sub>αc</sub> kc	Thermal Resistance						
<b>TO-37 1.5 AMPERE-MEDIUM POWER Ge</b>															
2N1172	1.5	30	.05	40	.20	30/90	.100	20	.20	0.5	.500	1.0	17	10°	C/watt
2N1609	1.5	60	.05	80	.10	30/75	.100	40	.10	1.0	.500	1.5	17	10°	C/watt
2N1610	1.5	60	.05	80	.10	50/125	.100	40	.10	0.6	.500	1.5	15	10°	C/watt
2N1611	1.5	40	.05	60	.10	30/75	.100	20	.10	1.0	.500	1.5	17	10°	C/watt
2N1612	1.5	40	.05	60	.10	50/125	.100	20	.10	0.6	.500	1.5	17	10°	C/watt
<b>TO-3 3·4·5·7 AMPERE-HIGH POWER Ge</b>															
2N176	7	30 <sup>①</sup>	.330	30	3	25/90	.500	10	2	1.0	3.0		4	0.8°	C/watt
2N255A	5	15 <sup>②</sup>	.220	15	5	25 <sup>③</sup>	.450	15	5					0.8°	C/watt
2N256	3	30 <sup>②</sup>	.003 <sup>④</sup>	30	3 <sup>⑤</sup>	15	.500	30	8	1.0	1.0		100 <sup>⑥</sup>	2.0°	C/watt
2N256A	5	25 <sup>②</sup>	.200	25	5	25 <sup>③</sup>	.450	15	5				5 <sup>⑤</sup>	0.8°	C/watt
2N297A	4	40	.300	60	3	40/100	.500	40	3	1.0	2.0	1.5	2	1.5°	C/watt
2N297A Sig C	4	40	.300	60	3	40/100	.500	40	3	1.0	2.0	1.5	2	1.5°	C/watt
2N301	3	32	.300	40	5	62.5	.700	10	2				5 <sup>⑤</sup>	1.0°	C/watt
2N301A	3	32	.300	60	5	62.5	.700	10	2				5 <sup>⑤</sup>	1.0°	C/watt
2N307	3	35 <sup>②</sup>	.015 <sup>④</sup>	35	5 <sup>⑤</sup>	20	.200	10	2	1.0	.200		3	2.0°	C/watt
2N379	7	40	.100 <sup>⑦</sup>	80*	8	20/90	2.0	20	8	1.0	2.0	1.3	3	0.8°	C/watt
2N380	7	30	.100 <sup>⑦</sup>	60*	8	20/90	2.0	20	8	1.0	2.0	1.3	3	0.8°	C/watt
2N392	5	45	.300	60	8	60/150	3.0	40	8	0.5	3.0	.7 <sup>⑥</sup>	6	0.8°	C/watt
2N456A	7	20	.200	40	2	30/90	5.0	20	2	0.5	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N457A	7	30	.200	60	2	30/90	5.0	20	2	0.5	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N458A	7	40	.200	80	2	30/90	5.0	20	2	0.5	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N553	4	40	.300	60	2	40/80	.500	40	2	0.9	3.0	1.5	25	1.5°	C/watt
2N554	5	30	.300	15	10	30	1.00	20	8					0.8°	C/watt
2N663	4	25	.300	50	12†	25/75	.500	20	4	1.0	3.0	1.5	15	2.0°	C/watt
2N665	5	40	.300	80	10	40/80	.500	40	2	0.9	3.0	1.5	20	2.0°	C/watt
2N665 Sig C	5	40	.300	80	10	40/80	.500	40	2	0.9	3.0	1.5	20	2.0°	C/watt
2N669	3	30 <sup>①</sup>	.300	30 <sup>③</sup>	20 <sup>③</sup>	250†	.500	10	2	0.4 <sup>⑤</sup>	3.0		3	0.8°	C/watt
2N1011	5	40	.300	80	15	30/75	3.0	40	3	1.5	3.0	1.0	5	1.2°	C/watt
2N1011 Sig C	5	40	.300	80	15	30/75	3.0	40	3	1.5	3.0	2.0	5	1.2°	C/watt
2N1021	7	50	.200	100	2	30/90	5.0	20	2	0.5	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N1022	7	50	.200	120	2	30/90	5.0	20	2	0.5	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N1159	5	60	1.0	80	8	30/75	3.0	20	8	1.0	3.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N1160	7	60	1.0	80	8	20/50	5.0	20	8	1.0	5.0	1.5	10 <sup>⑤</sup>	0.8°	C/watt
2N1168	5	30	.300	50	8	60 <sup>⑥</sup>	3.0	20	8	.25 <sup>⑤</sup>	3.0	0.7 <sup>⑥</sup>	10 <sup>⑤</sup>	0.8°	C/watt
2N1534	5	20	.500	40	20	35/70	3.0	12	.5	1.2	3.0	1.5	8.5 <sup>⑥</sup>	0.8°	C/watt
2N1535	5	30	.500	60	20	35/70	3.0	12	.5	1.2	3.0	1.5	8.5 <sup>⑥</sup>	0.8°	C/watt
2N1536	5	40	.500	80	20	35/75	3.0	12	.5	1.2	3.0	1.5	8.5 <sup>⑥</sup>	0.8°	C/watt
2N1971	4	40	.300	60	2	25/60	.500	40	2	0.9	3.0	1.5	25 <sup>⑥</sup>	1.5°	C/watt
<b>TO-41 10 AMPERE - HIGH SPEED NU-BASE (Non-Uniform Diffused Base) Ge</b>															
2N1073	10	40 <sup>③</sup>	.05	40	10	20/60	5	.75	50	0.6	5.0	1.0	30 <sup>⑤</sup>	0.8°	C/watt
2N1073A	10	80 <sup>③</sup>	.05	80	10	20/60	5	.75	50	0.6	5.0	1.0	30 <sup>⑤</sup>	0.8°	C/watt
2N1073B	10	120 <sup>③</sup>	.05	120	10	20/60	5	.75	50	0.6	5.0	1.0	30 <sup>⑤</sup>	0.8°	C/watt
<b>TO-36 15 AMPERE-HIGH POWER Ge</b>															
2N173	15	45	1.0	60	4	35/70	5	40	4	1.0	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt
2N174	15	55	1.0	80	4	25/50	5	60	4	0.9	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt
2N174A	15	40	0.3	80	8	40/80	1.2	60	8	0.7	12.0	0.9	100 <sup>⑥</sup>	0.5°	C/watt
JAN 2N174	15	40	0.3	80	8	40/80	1.2	60	8	0.7	12.0	0.9	100 <sup>⑥</sup>	0.5°	C/watt
2N277	15	25	1.0	40	8	35/70	5.0	20	8	0.3 <sup>⑤</sup>	12.0	.65 <sup>⑤</sup>	10 <sup>⑤</sup>	0.5°	C/watt
2N278	15	30	1.0	50	4	35/70	5.0	30	4	1.0	12.0	.65 <sup>⑤</sup>	10 <sup>⑤</sup>	0.5°	C/watt
2N441	15	25	1.0	40	8	20/40	5.0	20	8	0.3 <sup>⑤</sup>	12.0	.65 <sup>⑤</sup>	10 <sup>⑤</sup>	0.5°	C/watt
2N442	15	30	1.0	50	4	20/40	5.0	30	4	0.3 <sup>⑤</sup>	12.0	.65 <sup>⑤</sup>	10 <sup>⑤</sup>	0.5°	C/watt
2N443	15	45	1.0	60	4	20/40	5.0	40	4	1.0	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt
2N1099	15	55	1.0	80	4	35/70	5.0	40	4	0.7	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt
2N1100	15	65	1.0	100	4	25/50	5.0	80	4	0.7	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt
2N1358	15	40	0.3	80	4	40/80	1.2	60	4	0.7	12.0	0.9	100 <sup>⑥</sup>	0.5°	C/watt
2N1358A	15	60	1.0	100	4	25/50	5.0	60	4	0.7	12.0	0.9	5	0.5°	C/watt
JAN 2N1358M	15	40	0.3	80	4	25/50	5.0	40	4	0.7	12.0	0.9	5	0.5°	C/watt
2N1412	15	65	1.0	100	4	25/50	5.0	60	4	0.7	12.0	0.8	10 <sup>⑤</sup>	0.5°	C/watt
2N1412 USN	15	60	1.0	100	4	25/50	5.0	60	4	0.7	12.0	0.9	5	0.5°	C/watt
2N1970	15	50	1.0	100	4	17/40	5.0	40	4	1.0	12.0	0.9	10 <sup>⑤</sup>	0.5°	C/watt

① V<sub>CEs</sub>  
② V<sub>CEM</sub>  
\* V<sub>CEX</sub>

③ Power Gain db  
④ I<sub>CEM</sub>  
† @ 85° C

⑤ Typical  
⑥ f<sub>ab</sub>  
⑦ I<sub>CEO</sub>  
‡ Max. Value

⑧ @ 90° C  
R<sub>EB</sub> = 100 ohm  
⑨ V<sub>CEB</sub>

