

IC to 80 A . . . PT to 300 W . . . VCE to 170 V  
HOMETAXIAL-BASE N-P-N POWER TYPES

$I_C = 1.5$ A max. $P_T = 8.75$ W max. (TO-38)*	$I_C = 1.5$ A max. $P_T = 8.75$ W max. (TO-38)*	$I_C = 3.5$ A max. $P_T = 10$ W max. (TO-38)*	$I_C = 4$ A max. $P_T = 50$ W max. (TO-66)**	$I_C = 4$ A max. $P_T = 36$ W max. VERSAWATT (TO-220)	$I_C = 3$ A max. $P_T = 60$ W max. (TO-66)**	$I_C = 3$ A max. $P_T = 36$ W max. VERSAWATT (TO-220)	$I_C = 7$ A max. $P_T = 50$ W max. VERSAWATT (TO-220)	$I_C = 15$ A max. $P_T = 150$ W max. (TO-3)	$I_C = 16$ A max. $P_T = 75$ W max. VERSAWATT (TO-220)	$I_C = 10$ A max. $P_T = 150$ W max. (TO-3)	$I_C = 30$ A max. $P_T = 220$ W max. (TO-3)	$I_C = 16$ A max. $P_T = 250$ W max. (TO-3)	$I_C = 80$ A max. $P_T = 300$ W max. (Modified TO-3)
90 x 90 <sup>A</sup>	90 x 90	90 x 90	130 x 130	130 x 130	130 x 130	130 x 130	150 x 150	180 x 180	180 x 180	180 x 180	250 x 250	250 x 250	380 x 380
Family Designation													
2N1482	40349	2N5786	2N3054	2N5298	2N3441	2N6478	2N5496	2N3055	2N6103	2N3442	2N3771	2N3773	2N5578
<b>40347</b> $V_{CEV(sus)} = 60$ V $h_{FE} = 25-100$ @ 450 mA $f_T = 1.5$ MHz typ.  File No. 88 E	<b>40349</b> $V_{CEV(sus)} = 160$ V $h_{FE} = 30-125$ @ 150 mA $f_T = 1.5$ MHz typ.  File No. 88 E	<b>2N5786</b> $V_{CEV(sus)} = 45$ V $h_{FE} = 20-100$ @ 1.6 A $f_T = 1$ MHz min.  CT File No. 413 E	<b>40250</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 25-100$ @ 1.5 A $f_T = 1.2$ MHz typ. $P_T = 29$ W  CT File No. 112	<b>2N5295</b> <b>2N5296</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 30-120$ @ 1 A $f_T = 0.8$ MHz min.  CT File No. 322	<b>2N6263</b> $V_{CEV(sus)} = 130$ V $h_{FE} = 20-100$ @ 0.5 A $f_T = 1.2$ MHz typ. $P_T = 20$ W  File No. 529	<b>2N6477</b> $V_{CEV(sus)} = 130$ V $h_{FE} = 20-100$ @ 1 A $f_T = 0.8$ MHz min.  File No. 680	<b>2N5491</b> <b>2N5490</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 20-100$ @ 2 A $f_T = 0.8$ MHz min.  CT File No. 353	<b>2N6371</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 15-60$ @ 8 A $f_T = 1$ MHz typ. $P_T = 117$ W  CT File No. 607	<b>2N6102</b> <b>2N6103</b> $V_{CEV(sus)} = 45$ V $h_{FE} = 15-60$ @ 8 A $f_T = 0.8$ MHz min. $I_C = 16$ A max.  File No. 485	<b>2N4347</b> $V_{CEV(sus)} = 140$ V $h_{FE} = 15-60$ @ 2 A $f_T = 0.8$ MHz typ. $P_T = 100$ W  CT File No. 528	<b>2N6257</b> $V_{CEV(sus)} = 45$ V $h_{FE} = 15-75$ @ 8 A $f_T = 0.6$ MHz min. $P_T = 150$ W $I_C = 20$ A  File No. 525	<b>2N4348</b> $V_{CEV(sus)} = 140$ V $h_{FE} = 15-60$ @ 5 A $f_T = 0.7$ MHz typ. $P_T = 120$ W $I_C = 10$ A  CT File No. 526	<b>2N5575</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 10-40$ @ 60 A $f_T = 0.4$ MHz min.  File No. 359
<b>40348</b> $V_{CEV(sus)} = 90$ V $h_{FE} = 30-125$ @ 300 mA $f_T = 1.5$ MHz typ.  88 E		<b>2N5785</b> $V_{CEV(sus)} = 65$ V $h_{FE} = 20-100$ @ 1.2 A $f_T = 1$ MHz min.  CT 413 E	<b>2N6260</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 20-100$ @ 1.5 A $f_T = 0.8$ MHz min. $P_T = 29$ W  527	<b>2N5297</b> <b>2N5298</b> $V_{CEV(sus)} = 70$ V $h_{FE} = 20-80$ @ 1.5 A $f_T = 0.8$ MHz min.  CT 322	<b>2N3441</b> $V_{CEV(sus)} = 150$ V $h_{FE} = 25-100$ @ 0.5 A $f_T = 1.2$ MHz typ. $P_T = 25$ W  CT 529	<b>2N6478</b> $V_{CEV(sus)} = 150$ V $h_{FE} = 25-100$ @ 1 A $f_T = 0.8$ MHz min.  680	<b>2N5495</b> <b>2N5494</b> $V_{CEV(sus)} = 50$ V $h_{FE} = 20-100$ @ 3 A $f_T = 0.8$ MHz min.  CT 353	<b>2N6253</b> $V_{CEV(sus)} = 55$ V $h_{FE} = 20-70$ @ 3 A $f_T = 0.8$ MHz min. $P_T = 115$ W  524	<b>2N6098</b> <b>2N6099</b> $V_{CEV(sus)} = 65$ V $h_{FE} = 20-80$ @ 4 A $f_T = 0.8$ MHz min. $I_C = 10$ A max.  485	<b>2N3442</b> $V_{CEV(sus)} = 160$ V $h_{FE} = 20-70$ @ 3 A $f_T = 0.8$ MHz typ. $P_T = 117$ W  528	<b>2N3771</b> $V_{CEV(sus)} = 45$ V $h_{FE} = 15-60$ @ 15 A $f_T = 0.8$ MHz min. $P_T = 150$ W $I_C = 30$ A  525	<b>2N3773</b> $V_{CEV(sus)} = 160$ V $h_{FE} = 15-60$ @ 8 A $f_T = 0.7$ MHz typ. $P_T = 150$ W $I_C = 16$ A  526	<b>2N5578</b> $V_{CEV(sus)} = 70$ V $h_{FE} = 10-40$ @ 40 A $f_T = 0.4$ MHz min.  359
		<b>2N5784</b> $V_{CEV(sus)} = 80$ V $h_{FE} = 20-100$ @ 1 A $f_T = 1$ MHz min.  CT 413 E	<b>BDY 71</b> <b>2N3054</b> $V_{CEV(sus)} = 60$ V $h_{FE} = 80-200$ @ 0.5 A $f_T = 0.8$ MHz min. $P_T = 25$ W  CT 527	<b>2N5293</b> <b>2N5294</b> $V_{CEV(sus)} = 75$ V $h_{FE} = 30-120$ @ 0.5 A $f_T = 0.8$ MHz min.  CT 322	<b>2N6264</b> $V_{CEV(sus)} = 170$ V $h_{FE} = 20-60$ @ 1 A $f_T = 1.2$ MHz typ. $P_T = 50$ W  529		<b>2N5493</b> <b>2N5492</b> $V_{CEV(sus)} = 65$ V $h_{FE} = 20-100$ @ 2.5 A $f_T = 0.8$ MHz min.  CT 353	<b>2N3055</b> $V_{CEV(sus)} = 70$ V $h_{FE} = 20-70$ @ 4 A $f_T = 0.8$ MHz min. $P_T = 115$ W  CT 524	<b>2N6100</b> <b>2N6101</b> $V_{CEV(sus)} = 75$ V $h_{FE} = 20-80$ @ 5 A $f_T = 0.8$ MHz min. $I_C = 10$ A max.  485	<b>2N6262</b> $V_{CEV(sus)} = 170$ V $h_{FE} = 20-70$ @ 3 A $f_T = 0.8$ MHz min. $P_T = 150$ W  528	<b>2N3772</b> $V_{CEV(sus)} = 70$ V $h_{FE} = 15-60$ @ 10 A $f_T = 0.8$ MHz min. $P_T = 150$ W  CT 525	<b>2N6259</b> $V_{CEV(sus)} = 160$ V $h_{FE} = 15-60$ @ 8 A $f_T = 0.6$ MHz min. $P_T = 250$ W $I_C = 16$ A  526	
			<b>2N6261</b> $V_{CEV(sus)} = 85$ V $h_{FE} = 25-100$ @ 1.5 A $f_T = 0.8$ MHz min. $P_T = 50$ W  527				<b>2N5497</b> <b>2N5496</b> $V_{CEV(sus)} = 80$ V $h_{FE} = 20-100$ @ 3.5 A $f_T = 0.8$ MHz min.  CT 353	<b>2N6254</b> $V_{CEV(sus)} = 85$ V $h_{FE} = 20-70$ @ 5 A $f_T = 0.8$ MHz min. $P_T = 150$ W  524	<b>BD278</b> $V_{CEV(sus)} = 55$ V $h_{FE} = 15-75$ @ 4 A $f_T = 0.8$ MHz min. $I_C = 10$ A max.  668		<b>BDY29</b> $V_{CEV(sus)} = 85$ V $h_{FE} = 15-60$ @ 15 A $P_T = 220$ W  CT 525	<b>BDY37</b> $V_{CEV(sus)} = 150$ V $h_{FE} = 15-60$ @ 8 A $P_T = 150$ W  CT 526	
									<b>BD278A</b> $V_{CEV(sus)} = 55$ V $h_{FE} = 30$ min. @ 2 A  668				

<sup>A</sup>Pellet size—values shown are edge dimensions in thousandths-of-an-inch (mils)

\* Available with:  
a. flange for easy heat sinking  $R\theta_{JC} = 15^\circ$  C/W  
b. free-air radiator  $R\theta_{JA} = 40-50^\circ$  C/W

\*\* Available with free-air radiator  $R\theta_{JA} = 30^\circ$  C/W

File No. (e.g. File No. 88E), where shown, relates to the data bulletin.

CT—Complementary Type available, see matrix on Complementary-Pair Power Types.

**2N1482 FAMILY [n-p-n] (silicon)**  
 $f_T = 1.4 \text{ MHz typ}; P_T = 8.75 \text{ W max}$

**DESCRIPTION**

**2N TYPES**

- 2N1479● Medium Power DC-to-DC Converter, Inverter
- 2N1480● Medium Power Chopper, DC and Servo
- 2N1481● Medium Power Amplifier, Relay and Solenoid
- 2N1482● Medium Power Actuating Circuits

$V_{CE0(sus)}$ V	$V_{CER(sus)}$ V	$V_{CEV(sus)}$ V	$h_{FE}$		$I_{CBO} - \mu A$			$V_{CE(sat)} - V$			$V_{BE} - V$		
			$I_C$ A	$V_{CE}$ V	Temp. - °C 25	150	$V_{CB}$ V	$I_C$ A	$I_B$ A	$I_C$ A			
40	—	60	20-60	0.2	4	10	500	30	1.4	0.2	0.02	3	0.2
55	—	100	20-60	0.2	4	10	500	30	1.4	0.2	0.02	3	0.2
40	—	60	35-100	0.2	4	10	500	30	1.4	0.2	0.02	3	0.2
55	—	100	35-100	0.2	4	10	500	30	1.4	0.2	0.02	3	0.2

**OTHER TYPES**

- 40347 Low Power Audio Driver
- 40348 Relay and Solenoid Driver

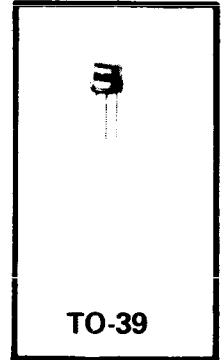
40	—	60	25-150	0.45	4	1	—	30	1	0.45	0.045	1.5	0.45
65	—	90	30-125	0.3	4	1	—	60	0.75	0.3	0.03	1.3	0.3

**HIGH-RELIABILITY TYPES**

- 40367 Hi-Rel Version of 2N1482

55	—	100	35-100	0.2	4	4	—	30	1.4	0.2	10	3	0.2
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●JAN types available



**2N TYPES**

- 2N1483■ Intermediate Power DC-to-DC Converter,
- 2N1484■ Inverter Chopper, Regulators, DC and
- 2N1485■ Servo Amplifiers Relay and Solenoid—
- 2N1486■ Actuating Circuits

**2N1486 FAMILY [n-p-n] (silicon)**  
 $f_T = 1.2 \text{ MHz typ}; P_T = 25 \text{ W max}$

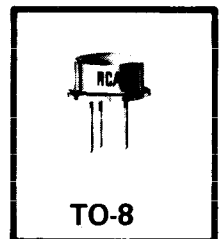
40	—	60	20-60	0.75	4	15	0.75	30	2	0.75	0.075	3.5	0.75
55	—	100	20-60	0.75	4	15	0.75	30	2	0.75	0.075	3.5	0.75
40	—	60	35-100	0.75	4	15	0.75	30	0.75	0.75	0.04	2.5	0.75
55	—	100	35-100	0.75	4	15	0.75	30	0.75	0.75	0.04	2.5	0.75

**HIGH-RELIABILITY TYPES**

- 40368 Hi-Rel Version of 2N1486

55	—	100	35-100	0.75	4	9	—	30	0.75	0.75	0.04	2.5	0.75
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■JAN & JAN TX types available



**2N TYPES**

- 2N1487● High Power DC-to-DC Converter, Inverter, Chopper
- 2N1488● Voltage and Current Regulator, DC and Servo
- 2N1489● Amplifier, Relay, and Solenoid
- 2N1490● Actuating Circuits

**2N1490 FAMILY [n-p-n] (silicon)**  
 $f_T = 0.8 \text{ MHz typ}; P_T = 75 \text{ W max}$

40	—	60	15-45	1.5	4	25	1000	30	3	1.5	0.3	3.5	1.5
55	—	100	15-45	1.5	4	25	1000	30	3	1.5	0.3	3.5	1.5
40	—	60	25-75	1.5	4	25	1000	30	1	1.5	0.1	2.5	1.5
55	—	100	25-75	1.5	4	25	1000	30	1	1.5	0.1	2.5	1.5

**HIGH-RELIABILITY TYPES**

- 40369 Hi-Rel Version of 2N1490

55	—	100	25-75	1.5	4	10	—	30	1	1.3	0.1	2.5	1.3
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●JAN types available

