

# NPN Transistors

**Microsemi**  
Power Enabled by Technology

Part Number	Microsemi Division	Package Outline	Type	Mil Spec	Data Sheet ID	PD (W)	IC (A)	Vcbo (V)	Vceo (V)	Vebo (V)	VCE(sat) (V)	@ IC (mA)	HFE min (dB)	HFE max (dB)
2N4311	PPC, Inc.	TO-5	STD		23221	1.5	5	100	60	6	1.4	1	40	120
2N4305	PPC, Inc.	TO-5	STD		23218	1.5	5	120	80	6	1	1	50	150
2N4309	PPC, Inc.	TO-5	STD		23220	1.5	5	120	80	6	1.4	1	50	150
2N2222A	PPC, Inc.	TO-18	STD		24374	1.8	0.8	75	40	6	0.3	0.15	100	300
2N1506	PPC, Inc.	TO-5	STD		22964	3	0.5	60	40	4	1.5	0.1	10	100
2N1613A	PPC, Inc.	TO-5	STD		22965	3	0.5	70	70	10	1	2	20	60
2N5011	PPC, Inc.	TO-5	STD		23251	4	0.5	600		5	1.5	0.03	30	180
2N5012	PPC, Inc.	TO-5	STD		23252	4	0.5	700		5	1.6	0.03	30	180
2N5013	PPC, Inc.	TO-5	STD		23253	4	0.5	800		5	1.6	0.02	30	180
2N5014	PPC, Inc.	TO-5	STD		23254	4	0.5	900		5	1.6	0.02	30	180
2N5015	PPC, Inc.	TO-5	STD		23255	4	0.5	1000		5	1.8	0.02	30	180
2N5010	PPC, Inc.	TO-5	STD		23250	4	0.5	500	500	5	1.4	0.03	30	180
2N5092	PPC, Inc.	TO-5	STD		23281	4	1	400	400	6	0.5	0.03	50	300
2N5095	PPC, Inc.	TO-5	STD		23282	4	1	500	500	6	0.5	0.03	50	300
2N5097	PPC, Inc.	TO-5	STD		23283	4	1	600	600	6	0.5	0.03	50	300
2N5098	PPC, Inc.	TO-5	STD		23284	4	1	700	700	6	0.5	0.03	50	300
2N5099	PPC, Inc.	TO-5	STD		23285	4	1	800	800	6	0.5	0.03	50	300
2N3500	PPC, Inc.	TO-5	STD		23105	5	0.3	150	150	6	0.4	0.15	40	120
2N3501	PPC, Inc.	TO-5	STD		23106	5	0.3	150	150	6	0.4	0.15	100	300
2N3866	Watertown	TO-39	STD		18716	5	0.4	60	30	3.5	1	100	15	200
JAN2N3866	Watertown	TO-39	STD	398	19937	5	0.4	60	30	3.5	1	100	15	200
JANTX2N3866	Watertown	TO-39	STD	398	19938	5	0.4	60	30	3.5	1	100	15	200
JANTXV2N3866	Watertown	TO-39	STD	398	19939	5	0.4	60	30	3.5	1	100	15	200
2N1700	PPC, Inc.	TO-5	STD		22966	5	1	60	40	6	1	0.2	20	80
2N3016	PPC, Inc.	TO-5	STD		23029	5	1	100	50	4	0.75	1	60	150
2N2102	PPC, Inc.	TO-5	STD		22980	5	1	120	65	7	0.5	0.15	40	120
2N2102A	PPC, Inc.	TO-5	STD		22981	5	1	120	65	7	0.5	0.15	40	120
2N2102S	PPC, Inc.	TO-5	STD		22982	5	1	120	65	7	0.5	0.15	40	120
2N2987	PPC, Inc.	TO-5	STD		23021	5	1	95	80	7	0.8	0.2	25	75
2N2989	PPC, Inc.	TO-5	STD		23023	5	1	95	80	7	0.8	0.2	60	120
2N2991	PPC, Inc.	TO-5 (s)	STD		23025	5	1	95	80	7	3	0.2	25	75
2N2993	PPC, Inc.	TO-5 (s)	STD		23027	5	1	95	80	7	3	0.2	60	120
2N2988	PPC, Inc.	TO-5	STD		23022	5	1	155	100	7	0.8	0.2	25	75
2N2990	PPC, Inc.	TO-5	STD		23024	5	1	155	100	8	0.8	0.2	60	120
2N2992	PPC, Inc.	TO-5 (s)	STD		23026	5	1	155	100	7	3	0.2	25	75
2N2994	PPC, Inc.	TO-5 (s)	STD		23028	5	1	155	100	7	3	0.2	60	120
2N3440	PPC, Inc.	TO-5	STD		23084	5	1	300	250	7	0.5	0.02	40	160
2N3440L	PPC, Inc.	TO-5	STD		23089	5	1	300	250	7	0.5	0.02	40	160
JAN2N3440	PPC, Inc.	TO-5	STD	368	23085	5	1	300	250	7	0.5	0.02	40	160
JAN2N3440L	PPC, Inc.	TO-5	STD	368	23090	5	1	300	250	7	0.5	0.02	40	160
JANS2N3440	PPC, Inc.	TO-5	STD	368	23088	5	1	300	250	7	0.5	0.02	40	160
JANS2N3440S	PPC, Inc.	TO-5	STD	368	23093	5	1	300	250	7	0.5	0.02	40	160
JANTX2N3440	PPC, Inc.	TO-5	STD	368	23086	5	1	300	250	7	0.5	0.02	40	160
JANTX2N3440L	PPC, Inc.	TO-5	STD	368	23091	5	1	300	250	7	0.5	0.02	40	160
JANTXV2N3440	PPC, Inc.	TO-5	STD	368	23087	5	1	300	250	7	0.5	0.02	40	160

Section Organization: NPN Transistor Parametric Section is organized by ascending PD (watts), followed by ascending IC (amps), and then by Part Number

**General Notes:**

1. Information on contacting Microsemi Divisions can be obtained on the back cover of this catalog
2. For detailed VCE(sat) data refer to the product datasheets by using the fax on demand system or contacting the Microsemi manufacturing division.
3. HFE values are typical values at 25°C and VCE = 5V, IC = 10mA.
4. Datasheets can be obtained from Microsemi's Website or Fax on Demand System by specifying the Data Sheet ID

Fax On Demand (800) 713-4113

**NPN-6**

<http://www.microsemi.com>

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