

Silicon Power Transistors

	Type No.	Case	Construction (see note 1)	Maximum Ratings at $T_{case} = 25^{\circ}C$					Typical Performance								NOTES		
				V_{CBO} V	V_{CEO} V	V_{EBO} V	$I_{C(DC)}$ A	P_{tot} W	f MHz	V_{CC} V	P_{IN} W	P_{OUT} W	η_C^2 %	f_T MHz	C_{OB} pF	sc/oc ³			
VHF NPN Power Devices	2N3866	TO39	EP	55	30	4	0.5	5.0	400	28	0.1	1.2	45	800	2.5	—	Typical 10 W AM		
	XB401	TO39	EP	65	40	4	1.0	7.0	175	28	0.4	2.8	70	500	6.0	—			
	2N3375	TO60	EP	65	40	4	1.5	11.6	175	28	1.0	8.0	70	500	9.0	✓			
	XB404	TO60	EP	65	40	4	3.0	23	175	28	2.0	12.0	75	500	13.0	✓			
	2N3632	TO60	EP	65	40	4	3.0	23	175	28	3.5	15.0	80	400	18.0	✓			
	XB408	TO60	EP	65	40	4	5.0	30	175	28	9.0	27.0	80	400	18.0	✓			
	XB409	TO60	EP	65	40	4	7.5	30	175	28	6.0	27.0	75	400	18.0	✓			
	2N4128	TO117	EP	65	40	4	5.0	35	175	25	6.0	27.0	75	400	18.0	✓			
VHF NPN FM Amplifier	XB411	TO39	EP	40	25	4	1.0	5	175	13.5	0.25	1.2	45	500	16.0	—	13 W FM Kit		
	XB412	TO117	EP	40	25	4	1.5	10	175	13.5	1.0	5.0	70	400	16.0	—			
	XB413	TO177	EP	40	25	4	3.0	25	175	13.5	4.0	13.0	80	400	32.0	✓			
VHF NPN AM Amplifier	XB421	TO39	EP	65	40	4	1.0	5	175	12.5	0.3	1.0	60	400	16	—	10 W AM Kit		
	XB422	TO117	EP	65	40	4	1.5	10	175	12.5	1	3	65	400	24	—			
	XB423	TO117	EP	65	40	4	5.0	30	175	12.5	3	10	70	400	32	✓			
NPN Medium Power	Type No.	Case	Construction (see note 1)	Maximum Ratings at $T_{case} = 25^{\circ}C$					Characteristics $T_{case} = 25^{\circ}C$								Min. f_T MHz	Max. T_{OFF} μs	Under max. ratings column P_{tot} should read see note 4
	V_{CBO} V	V_{CEO} V	V_{EBO} V	$I_{C(DC)}$ A	P_{tot} W	I_C A	h_{FE}		$V_{CE(SAT)}$										
	2N1714	TO5	3DM	60	6	0.75	10^2	0.2	Min. 20	Max. 60	0.2	I_C A	I_C A	Max. V	16				
	2N1715	TO5		100	6	0.75	10^2	0.2	20	60	0.2	0.02	2.0	16					
	2N1716	TO5		60	6	0.75	10^2	0.2	40	120	0.2	0.02	2.0	16					
	2N1717	TO5		100	6	0.75	10^2	0.2	40	120	0.2	0.02	2.0	16					
	2N1718	T.SLUG		60	6	0.75	10^2	0.2	20	60	0.2	0.02	2.0	16					
	2N1719	T.SLUG		100	6	0.75	10^2	0.2	20	60	0.2	0.02	2.0	16					
	2N1720	T.SLUG		60	6	0.75	10^2	0.2	40	120	0.2	0.02	2.0	16					
	2N1721	T.SLUG		100	6	0.75	10^2	0.2	40	120	0.2	0.02	2.0	16					
	2N4000	TO5		EP	100	80	8	1	15^2	0.5	30	120	1.0	0.1	0.5		40	2	
	2N4001	TO5			120	100	8	1	15^2	0.5	40	120	1.0	0.1	0.5		40	2	
	2N4300	TO5	100		80	8	2	15^2	1.0	30	120	2.0	0.2	0.5	30		1.5		
	2N3418	TO5	85		60	8	3	10^2	1.0	20	60	2.0	0.2	0.5	40		1.2		
	2N3419	TO5	125		80	8	3	10^2	1.0	20	60	2.0	0.2	0.5	40		1.2		
	2N3420	TO5	85		60	8	3	10^2	1.0	40	120	2.0	0.2	0.5	40		1.2		
	2N3421	TO5	125		80	8	3	10^2	1.0	40	120	2.0	0.2	0.5	40		1.2		

NOTE 1: The following symbols have been used throughout the Product Summary:

Under "Construction":

A — Alloyed
 D — Diffused
 E — Epitaxial
 G — Grown
 M — Mesa
 P — Planar

Under h_{FE} :

* — h_{fe}

Under f_T :

ϕ — f_{hfb}
 Δ — f_{hfe}
 \ddagger — typical

Under Dissipation:

\uparrow — dissipation at $T_{case} = 25^{\circ}C$

NOTE 2: Collector efficiency = $(P_{OUT} \div P_{DC}) \times 100\%$. No account is taken of P_{IN} .

NOTE 3: Passes Texas Instruments load open/short circuit test.

NOTE 4: $T_{case} = 100^{\circ}C$.