### N-Channel Junction Field Effect Transistors

#### **GENERAL PURPOSE**

TYPE NO.	CASE	MAXIMUM Pd (mW)	BVGSS (V)		IDSS (mA) min max		Y <sub>fs</sub> (mmhos) min max		VGS(off) (V) min max		Crss (pF) max	NF (dB) max
BC 264A BC 264B BC 264C BC 264D	TO-92DE TO-92DE TO-92DE TO-92DE	300 300 300 300	30 30 30 30	2 3.5 5 7	4.5 6.5 8 12	2.5 3 3.5 4	- - -	0.5 0.5 0.5 0.5	8 8 8 8	4+ 4+ 4+ 4+	1.2+ 1.2+ 1.2+ 1.2+	2 2 2 2 2
BF 246A BF 246B BF 246C BF 247A BF 247B BF 247C	TO-92DA TO-92DA TO-92DA TO-92DE TO-92DE TO-92DE	250 250 250 250 250 250 250	25 25 25 25 25 26 25	30 60 110 30 60 110	80 140 250 80 140 250	8 8 8 8 8	17 17 17 17 17 17	0.6 0.6 0.6 0.6 0.6 0.6	14.5 14.5 14.5 14.5 14.5 14.5	11+ 11+ 11+ 11+ 11+ 11+	3.5+ 3.5+ 3.5+ 3.5+ 3.5+ 3.5+	- - - - -
2N 3684 2N 3684A 2N 3685 2N 3685A 2N 3686	TO-72 TO-72 TO-72 TO-72 TO-72	300 300 300 300 300	50 50 50 50 50	2.5 2.5 1 1 0.4	7.5 7.5 3 3	2 - 1.5  1	3 - 2.5 - 2	2 2 1 1 0.6	5 5 3.5 3.5 2	4 4 4 4	1.2 1.2 1.2 1.2 1.2	0.5 0.5 0.5 0.5 0.5
2N 3686A 2N 3687 2N 3687A 2N 3967 2N 3967A	TO-72 TO-72 TO-72 TO-72 TO-72	300 300 300 300 300	50 50 50 30 30	0.4 0.1 0.1 2.5 2.5	1.2 0.5 0.5 10	- 0.5 - 2.5 2.5	1.5 - - -	0.6 0.3 0.3 2 2	2 1.2 1.2 5 5	4 4 4 5 5	1.2 1.2 1.2 1.3 1.3	0.5 0.5 0.5 1.5 1.5
2N 3968 2N 3968A 2N 3969 2N 3969A 2N 4220	TO-72 TO-72 TO-72 TO-72 TO-72DI	300 300 300 300 300	30 30 30 30 30	1 0.4 0.4 0.5	5 5 2 2 3	2 2 1.3 1.3	- - - - 4	  	3 3 1.7 1.7 4	5 5 5 5	1.3 1.3 1.3 1.3	1.5 1.5 1.5 1.5 2.5
2N 4221 2N 4222 2N 4302 2N 4303 2N 4304	TO-72DI TO-72DI TO-106 TO-106 TO-106	300 300 300 300 300	30 30 30 30 30	2 5 0.5 4 0.5	6 15 5 10 15	2 2.5 1 2	5 6 - -	- - - -	6 8 4 6 10	6 6 6 6	2 2 3 3 3	2.5 2.5 2.5 2.5 2.5
2N 4338 2N 4339 2N 4340 2N 4341 2N 5103	TO-18 TO-18 TO-18 TO-18 TO-72	300 300 300 300 300	50 50 50 50 25	0.2 0.5 1.2 3 1	0.6 1.5 3.6 9 8	0.6 0.8 1.3 2 2	1.8 2.4 3 4	0.3 0.6 1 2 0.5	1 1.8 3 6 4	7 7 7 7 5	3 3 3 1	1 1 1 1
2N 5104 2N 5163 2N 5457 2N 5458 2N 5459	TO-72 TO-106 TO-92DD TO-92DD TO-92DD	300 200 310 310 310	25 25 25 25 25 25	2 1 1 2 4	6 40 5 9	3.5 2 1 1.5 2	7.5 9 5 5.5 6	0.5 0.4 0.5 1 2	4 8 6 7 8	5 12 7 7 7	1 3 3 3	- - - -
2N 5556 2N 5557 2N 5558 2N 5716 2N 5717 2N 5718	TO-72 TO-72 TO-72 TO-92DD TO-92DD TO-92DD	300 300 300 350 350 350	30 30 30 40 40 40	0.5 2 4 0.05 0.2 0.8	2.5 5 10 0.25 1 4	1.5 1.5 1.5 0.2 0.4 0.5	6.5 6.5 6.5 1 1.6	0.2 0.8 1.5 0.2 0.5	4 5 6 3 5	6 6 5 5	3 3 1.5 1.5 1.5	1 1 1 - -
2SK 30A-R 2SK 30A-O 2SK 30A-Y 2SK 30A-GR 2SK 34	TO-92DA TO-92DA TO-92DA TO-92DA TO-92DA	100 100 100 100 100	50 50 50 50 50	0.3 0.6 1.2 2.6 0.3	0.75 1.4 3 6.5 12#	1.2 1.2 1.2 1.2 1.2	- - - -	0.4 0.4 0.4 0.4 0.3	5 5 5 5	8.2+ 8.2+ 8.2+ 8.2+ 8.2+	2.6+ 2.6+ 2.6+ 2.6+ 1.5+	5 5 5 5 6
2SK 50 2SK 66	TO-92DA TO-92DA	20 100	10 55	0,07 0.3	1# 6.5#		Ξ	_	<u>-</u>	_ 8.2+	_ 2.6+	- 5

## N-Channel Junction Field Effect Transistors

#### **VHF/UHF AMPLIFIER**

TYPE NO.	CASE	MAXIMUN Pd (mW)			Y <sub>fs</sub> (mmhos) min max	VGS(off) (V) min max	Ciss (pF) max	Crss (pF) max	NF (dB) max
BF 244A BF 244B BF 244C BF 245A BF 245B	TO-92DA TO-92DA TO-92DA TO-92DE TO-92DE	300 300 300 300 300	30 30 30 30 30	2 6.5 6 15 12 25 2 6.5 6 15	3 6.5 3 6.5 3 6.5 3 6.5 3 6.5	0.5 8 0.5 8 0.5 8 0.5 8 0.5 8	4 4 4 4	1.6 1.6 1.6 1.6 1.6	1.5+ 1.5+ 1.5+ 1.5+ 1.5+
BF 245C BF 256A BF 256B BF 256C	TO-92DE TO-92DE TO-92DE TO-92DE	300 360 360 360	30 30 30 30	12 25 3 7 6 13 11 18	3 6.5 4.5 – 4.5 – 4.5 –	0.5 8 0.5 7.5 0.5 7.5 0.5 7.5	4 4.5 4.5 4.5	1.6 1.2 1.2 1.2	1.5+ 7.5+ 7.5+ 7.5+
2N 3819 2N 3823 2N 4223 2N 4224 2N 4416	TO-92DA TO-72DG TO-72DI TO-72DI TO-72DG	300 300 300 300 300	25 30 30 30 30 30	2 20 4 20 3 18 2 20 5 15	2 6.5 3.5 6.5 3 7 2 7.5 4.5 7.5	- 8 - 8 - 8 - 6	8 6 6 0.8 4	4 2 2 2 2 0.8	_ 2.5 5 _ 4
2N 4416A 2N 5245 2N 5246 2N 5247 2N 5248	TO-72DG TO-92DE TO-92DE TO-92DE TO-92DA	300 360 360 360 360	35 30 30 30 30	5 15 5 16 1.5 7 8 24 4 20	4.5 7.5 4.5 7.5 3 6 4.5 8 3.5 6.5	2.5 6 1 6 0.5 4 1.5 8	4 4.5 4.5 4.5 6	0.8 1 1 1	4 2 2 2
2N 5484 2N 5485 2N 5486 2N 5668 2N 5669 2N 5670	TO-92DD TO-92DD TO-92DD TO-92DD TO-92DD TO-92DD	310 310 310 310 310 310	25 25 25 25 26 25 25	1 5 4 10 8 20 1 5 4 10 8 20	3 6 3.5 7 4 8 1.5 6.5 2 6.5 3 7.5	0.3 3 0.5 4 2 6 0.2 4 1 6 2 8	5 5 7 7	1 1 1 3 3	3 2 2.5 2.5 2.5 2.5
2SK 19-Y 2SK 19-GR 2SK 19-BL 2SK 33 2SK 41	TO-92DD TO-92DD TO-92DD TO-92DD TO-92DD	200 200 200 200 150 100	18 18 18 20 18	3 7 6 14 12 24 2.5 20# 0.6 24#	7+ - 7+ - 7+ - 4.5 - 7+ -	1.2 — 1.2 — 1.2 — 1 8 0.6 5#	-	0.65 0.65 0.65 0.5+ 0.75	3.5 3.5 3.5 2.5+ 3.5
2SK 56 2SK 83	TO:92DE TO:92DE	100 100	- 10 25	0.5 6# 0.5 12#	1.9 – 1.9 –	- 2.5 - 2.5	4+ 4+	1.5 0.15	4.5 3.5

#Groupings available +Typical value

# N-Channel Junction Field Effect Transistors

#### SWITCHING/CHOPPER

TYPE NO.	ľ	MAXIMUM RATINGS		1 <sub>DSS</sub>		VGS(off)		rds(on)	Ciss	Crss	ton	toff
	CASE	P <sub>d</sub> (mW)	BV <sub>GSS</sub> (V)	(n min	nA) max	min (	V) max	(ohms) max	(pF) max	(pF) max	(ns) max	(ns) max
2N 3966	TO-72	300	30	2		4	6	220	6	1.5	120	100
2N 3970	TO-18	1800▲	40	50	150	4	10	30	25	6	20	30
2N 3971	TO-18	1800▲	40	25	75	2	5	60	25	6	30	6
2N 3972	TO-18	1800▲	40	5	30	0.5	3	100	25	6	80	10
2N 4091	TO-18	1800▲	40	30	-	5	10	30	161	5	25	40
2N 4092	TO-18	1800▲	40	15	_	2	7	50	16	5	35	6
2N 4093	TO-18	1800▲	40	8	-	1	5	80	16	5	60	8
2N 4391	TO-18	1800▲	40	50	150	4	10	30	14	3,5	15	2
2N 4392	TO-18	1800▲	40	25	75	2	5	60	14	3.5	15	3
2N 4393 .	TO-18	1800▲	40	5	30	0,5	3	100	14	3.5	15	5
2N 4856	TO-18	360	40	50	-	4	10	25	18	8	9	2
2N 4856A	TO-18	360	40	50	_	4	10	25	10	4	8	2
2N 4857	TO-18	360	40	20	100	2	6	40	18	8	10	5
2N 4857A	TO-18	360	40	20	100	2	6	40	10	3.5	10	4
2N 4858	TO-18	360	40	8	80	0.8	4	60	18	8	20	10
2N 4858A	TO-18	360	40	8	80	8,0	4	60	10	3.5	16	8
2N 4859	TO-18	360	30	50	-	4	10	25	18	8	9	2
2N 4859A	TO-18	360	30	50	-	4	10	25	10	4	8	2
2N 4860	TO-18	360	30	20	100	2	6	40	18	8	10	5
2N 4860A	TO-18	360	30	20	100	2	6	40	10	3.5	10	4
2N 4861	TO-18	360	30	8	80	8,0	4	60	18	8	20	10
2N 4861A	TO-18	360	30	8	80	8,0	4	60	10	3,5	16	8
2N 5555	TO-92DD	310	25	15	_		-	150	5	1,2	5	1 !
2N 5638	TO-92DD	310	30	50	_		-	30	10	4	9	1
2N 5639	TO-92DD	310	30	25	_	ļ		60	10	4	14	
2N 5640	TO-92DD	310	30	5	-		-	100	10	4_	18	
2N 5653	TO-92DD	310	30	40	-		-	50	10	3.5	9	1 3
2N 5654	TO-92DD	310	30	15	_	-		100	10	3.5	14	1 3

▲at T<sub>C</sub> = 25°C + Typical value

### Packaging Information



