



Small Signal Transistors U.S. Specification (Preferred Series)

SOT-23 Case, 350mW

TYPE NO.	BV _{CBO}	BV _{CEO} *BV _{CES}	BV _{EBO}	I _{CBO} @ V _{CB} *I _{CES}	V _{CB} (V)	h _{FE}		@ V _{CE}	@ I _C	V _{CE(SAT)} @ I _C		C _{ob}	f _T	NF	t _{OFF}
	(V) MIN	(V) MIN	(V) MIN	(nA) MAX		MIN	MAX	(V)	(mA)	(V) MAX	(mA)	(pF) MAX	(MHz) MIN	(dB) MAX	(ns) MAX

General Purpose Amplifier/Switches

Devices are listed in order of descending breakdown voltage.

NPN

CMPT8099	80	80	6.0	100	80	100	300	5.0	1.0	0.4	100	6.0	150	-	-
CMPT930	45	45	5.0	10	45	100	300	5.0	0.01	1.0	10	8.0	30	3.0	-
CMPT2222A	75	40	6.0	10	60	100	300	10	150	1.0	500	8.0	300	4.0	285
CMPT3904	60	40	6.0	50*	30	100	300	1.0	10	0.3	50	4.0	300	5.0	250
CMPT4401	60	40	6.0	100*	35	100	300	1.0	150	0.75	500	6.5	200	-	255

PNP

CMPT8599	80	80	5.0	100	80	100	300	5.0	1.0	0.4	100	4.5	150	-	-
CMPT2907A	60	60	5.0	10	50	100	300	10	150	1.6	500	8.0	200	-	100
CMPT3906	40	40	5.0	50*	30	100	300	1.0	10	0.4	50	4.5	250	4.0	300
CMPT4403	40	40	5.0	100*	35	100	300	2.0	150	0.75	500	8.5	200	-	255

Saturated Switches

Devices are listed in order of descending f_T.

NPN

CMPT2369	40	15	4.5	400	20	40	120	1.0	10	0.25	10	4.0	500	-	18
CMPT3646	40	15	5.0	500*	20	15	-	1.0	300	0.5	300	5.0	350	-	28

PNP

CMPT3640	12	12	4.0	10*	6.0	30	120	0.3	10	0.5	50	3.5	300	-	60
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Low Noise Amplifiers

Devices are listed in order of ascending NF.

NPN

CMPT5089	30	25	4.5	50	15	400	1,200	5.0	0.1	0.5	10	4.0	50	2.0	-
CMPT2484	60	60	6.0	10	45	250	-	5.0	1.0	0.35	1.0	6.0	-	3.0	-
CMPT5088	35	30	4.5	50	20	300	900	5.0	0.1	0.5	10	4.0	50	3.0	-
CMPT6428	60	50	6.0	10	30	250	650	5.0	0.1	0.6	100	3.0	100	-	-
CMPT6429	55	45	6.0	10	30	500	1,250	5.0	0.1	0.6	100	3.0	100	-	-

PNP

CMPT5087	50	50	3.0	50	35	250	800	5.0	0.1	0.3	10	4.0	40	2.0	-
CMPT5086	50	50	3.0	50	35	150	500	5.0	0.1	0.3	10	4.0	40	3.0	-

High Current

Devices are listed in order of descending breakdown voltage.

NPN

CMPT3019	120	80	7.0	10	90	100	300	10	150	0.5	500	12	100	4.0	-
CMPTA06	80	80	4.0	100	80	50	-	1.0	100	0.25	100	-	100	-	-

PNP

CMPT4033	80	80	5.0	50	60	100	300	5.0	100	0.5	500	20	100	-	-
CMPTA56	80	80	4.0	100	80	50	-	1.0	100	0.25	100	-	50	-	-



Small Signal Transistors U.S. Specification (Preferred Series) SOT-23 Case, 350mW (Continued)

TYPE NO.	BV _{CB0}	BV _{CEO}	BV _{EBO}	I _{CBO} @ V _{CB}	h _{FE}	@ V _{CE}	@ I _C	V _{CE(SAT)} @ I _C	C _{ob}	f _T	NF	t _{OFF}
	(V) MIN	*BV _{CES} (V) MIN	(V) MIN	*I _{CES} (nA) MAX								

High Voltage Devices are listed in order of descending breakdown voltage.

NPN

CMPTA44	450	400	6.0	100	400	30	200	10	10	0.75	50	7.0	20	-	-
CMPT6517	350	350	5.0	50	250	30	200	10	30	1.0	50	6.0	40	-	-
CMPTA42	300	300	6.0	100	200	40	-	10	30	0.5	20	3.0	50	-	-
CMPT5551	180	160	6.0	50	120	80	250	5.0	10	0.2	50	6.0	100	8.0	-

PNP

CMPT6520	350	350	5.0	50	250	30	200	10	30	1.0	50	6.0	40	-	-
CMPTA92	300	300	5.0	250	200	25	-	10	30	0.5	20	6.0	50	-	-
CMPT5401	160	150	5.0	50	120	60	240	5.0	10	0.5	50	6.0	100	8.0	-

RF Oscillator Devices are listed in order of descending f_T.

NPN

CMPT5179	20	12	2.5	20	15	25	250	1.0	3.0	0.4	10	1.0	900	4.5	-
CMPTH10	30	25	3.0	100	25	60	-	10	4.0	0.5	4.0	0.7	650	-	-
CMPT918	30	15	3.0	10	15	20	-	1.0	3.0	0.4	10	1.7	600	6.0	-

Darlington Devices are listed in order of descending h_{FE}.

NPN

CMPT6427	40	40	12	50	30	20,000	200,000	5.0	100	1.5	500	7.0	130	10	-
CMPTA14	30	30*	10	100	30	20,000	-	5.0	100	1.5	100	-	125	-	-
CMPTA13	30	30*	10	100	30	10,000	-	5.0	100	1.5	100	-	125	-	-
CMPTA27	60	60*	10	100	50	10,000	-	5.0	100	1.5	100	-	125	-	-
CMPTA29	100	100	12	100	80	10,000	-	5.0	100	1.5	100	8.0	125	-	-



PNP

CMPTA64	30	30*	10	100	30	20,000	-	5.0	100	1.5	100	-	125	-	-
CMPTA63	30	30*	10	100	30	10,000	-	5.0	100	1.5	100	-	125	-	-

Shaded areas indicate Darlington.



Small Signal MOSFET SOT-23 Case

TYPE NO.	r _{DS(ON)} @ I _D		V _{GS(th)}		BV _{DSS}	C _{iss}	C _{rss}	t _{on}	t _{OFF}
	(Ω) MAX	(A) MAX	(V) MIN	(V) MAX					
2N7002	7.5	0.5	1.0	2.5	60	50	5.0	20	20