

Digital Transistors

ELECTRICAL CHARACTERISTICS : PNP

100 mA Series

BASIC PART NUMBER	V _{i(off)}			V _{i(on)}			V _{o(on)}			I _i			I _{o(off)}			V _{CE(sat)}			Cob@F=1MHz			CUT-OFF FREQ		
	Max. (V)	V _{CC} (V)	I _o (mA)	Min. (V)	V _o (V)	I _o (mA)	Typ. (V)	Max. (V)	I _o (mA)	I _i (mA)	Max. (mA)	V _i (V)	Max. (μA)	V _{CC} (V)	V _i (V)	Max. (V)	I _c (mA)	I _B (mA)	Typ. (pF)	V _{CB} (V)	I _E (mA)	f _T (MHz)	V _{CE} (V)	I _c (mA)
DTA113Z	0.3	5	0.1	3	0.3	20	0.1	0.3	10	0.5	7.2	5	0.5	50	0	0.3	5	0.25	3.7	10	0	250	10	5
DTA114E	0.5	5	0.1	3	0.3	10	0.1	0.3	10	0.5	0.88	5	0.5	50	0	0.3	5	0.25	4.7	10	0	250	10	5
DTA114W	0.8	5	0.1	3	0.3	2	0.1	0.3	10	0.5	0.88	5	0.5	50	0	0.3	5	0.25	3.6	10	0	250	10	5
DTA114Y	0.3	5	0.1	1.4	0.3	1	0.1	0.3	5	0.25	0.88	5	0.5	50	0	0.3	5	0.25	6.2	10	0	250	10	5
DTA115E	0.5	5	0.1	3	0.3	1	0.1	0.3	5	0.25	0.15	5	0.5	50	0	0.3	5	0.25	1.6	10	0	250	10	5
DTA115U	3.3	5	0.1	12	0.3	1	0.1	0.3	1	0.2	0.1	5	0.5	50	0	0.3	5	0.25	1.7	10	0	250	10	5
DTA123E	0.5	5	0.1	3	0.3	20	0.1	0.3	10	0.5	3.8	5	0.5	50	0	0.3	5	0.25	3.7	10	0	250	10	5
DTA123J	0.5	5	0.1	1.1	0.3	5	0.1	0.3	5	0.25	3.6	5	0.5	50	0	0.3	5	0.25	3.6	10	0	250	10	5
DTA123Y	0.3	5	0.1	3	0.3	20	0.1	0.3	10	0.5	3.8	5	0.5	50	0	0.3	5	0.25	3.7	10	0	250	10	5
DTA124E	0.5	5	0.1	3	0.3	5	0.1	0.3	10	0.5	0.36	5	0.5	50	0	0.3	5	0.25	4.4	10	0	250	10	5
DTA124X	0.4	5	0.1	2.5	0.3	2	0.1	0.3	10	0.5	0.36	5	0.5	50	0	0.3	5	0.25	4.4	10	0	250	10	5
DTA143E	0.5	5	0.1	3	0.3	20	0.1	0.3	10	0.5	1.8	5	0.5	50	0	0.3	5	0.25	6.0	10	0	250	10	5
DTA143X	0.3	5	0.1	2.5	0.3	20	0.1	0.3	10	0.5	1.8	5	0.5	50	0	0.3	5	0.25	6.0	10	0	250	10	5
DTA143Y	0.3	5	0.1	2.2	0.3	5	0.1	0.3	10	0.5	1.8	5	0.5	50	0	0.3	5	0.25	4.6	10	0	250	10	5
DTA143Z	0.5	5	0.1	1.3	0.3	5	0.1	0.3	5	0.25	1.8	5	0.5	50	0	0.3	5	0.25	3.4	10	0	250	10	5
DTA144E	0.5	5	0.1	3	0.3	2	0.1	0.3	10	0.5	0.18	5	0.5	50	0	0.3	5	0.25	2.9	10	0	250	10	5
DTA144V	1.0	5	0.1	6	0.3	2	0.1	0.3	10	0.5	0.16	5	0.5	50	0	0.3	5	0.25	2.8	10	0	250	10	5
DTA144W	0.8	5	0.1	4	0.3	2	0.1	0.3	10	0.5	0.16	5	0.5	50	0	0.3	5	0.25	2.9	10	0	250	10	5
DTA214Y	0.3	5	0.1	1.4	0.3	1	0.1	0.3	50	2.5	0.88	5	0.5	50	0	0.3	5	0.25	6.1	10	0	250	10	5
DTA1D3R	1.5	5	0.1	4	0.3	5	0.1	0.3	10	1	3.7	5	0.5	50	0	0.3	5	0.25	3.5	10	0	250	10	5

BASIC PART NUMBER	BV _{CEO}		BV _{CB0}		BV _{EBO}		I _{CB0} Max. (μA)	V _{CB} (V)	I _{EBO} Max. (μA)	V _{EB} (V)	V _{CE(sat)}			Cob@F=1MHz			CUT-OFF FREQ		
	Min. (V)	I _c (mA)	Min. (V)	I _c (μA)	Min. (V)	I _E (μA)					Max. (V)	I _c (mA)	I _B (mA)	Typ. (pF)	V _{CB} (V)	I _E (mA)	f _T (MHz)	V _{CE} (V)	I _c (mA)
DTA143T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	5	0.25	6.1	10	0	250	10	5
DTA114T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	10	1	6.1	10	0	250	10	5
DTA124T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	5	0.5	6.1	10	0	250	10	5
DTA144T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	5	0.5	6.1	10	0	250	10	5
DTA115T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	1	0.1	1.5	10	0	250	10	5
DTA125T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	0.5	0.05	1.4	10	0	250	10	5
DTA113T	50	1	50	50	5	50	0.5	50	0.5	4	0.3	5	0.25	6.1	10	0	250	10	5

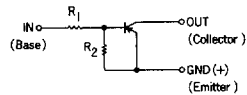
BASIC PART NUMBER	BV _{CEO}		BV _{CB0}		BV _{EBO}		I _{CB0} Max. (μA)	V _{CB} (V)	I _{EBO} Max. (μA)	V _{EB} (V)	V _{CE(sat)}			Cob@F=1MHz			CUT-OFF FREQ		
	Min. (V)	I _c (mA)	Min. (V)	I _c (μA)	Min. (V)	I _E (μA)					Max. (V)	I _c (mA)	I _B (mA)	Typ. (pF)	V _{CB} (V)	I _E (mA)	f _T (MHz)	V _{CE} (V)	I _c (mA)
DTA114G	50	1	50	50	5	720	0.5	50	580	4	0.3	10	0.5	3.7	10	0	250	10	50
DTA124G	50	1	50	50	5	330	0.5	50	260	4	0.3	10	0.5	3.7	10	0	250	10	50
DTA144G	50	1	50	50	5	160	0.5	50	130	4	0.3	10	0.5	3.7	10	0	250	10	50
DTA115G	50	1	50	50	5	72	0.5	50	58	4	0.3	5	0.25	3.7	10	0	250	10	50
DTB114G	50	1	50	50	5	720	0.5	50	580	4	0.3	10	0.5	6.8	10	0	200	10	50

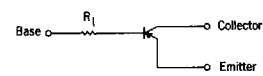
500 mA Series

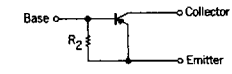
BASIC PART NUMBER	V _{i(off)}			V _{i(on)}			V _{o(on)}			I _i			I _{o(off)}			V _{CE(sat)}			Cob@F=1MHz			CUT-OFF FREQ		
	Max. (V)	V _{CC} (V)	I _o (mA)	Min. (V)	V _o (V)	I _o (mA)	Typ. (V)	Max. (V)	I _o (mA)	I _i (mA)	Max. (mA)	V _i (V)	Max. (μA)	V _{CC} (V)	V _i (V)	Max. (V)	I _c (mA)	I _B (mA)	Typ. (pF)	V _{CB} (V)	I _E (mA)	f _T (MHz)	V _{CE} (V)	I _c (mA)
DTB113E	0.5	5	0.1	3	0.3	20	0.1	0.3	50	2.5	7.2	5	0.5	50	0	0.3	5	0.25	6.6	10	0	200	10	50
DTB113Z	0.3	5	0.1	3	0.3	20	0.1	0.3	50	2.5	7.2	5	0.5	50	0	0.3	5	0.25	7.1	10	0	200	10	50
DTB114E	0.5	5	0.1	3	0.3	10	0.1	0.3	50	2.5	0.88	5	0.5	50	0	0.3	5	0.25	7.2	10	0	200	10	50
DTB123E	0.5	5	0.1	3	0.3	20	0.1	0.3	50	2.5	3.8	5	0.5	50	0	0.3	5	0.25	8.1	10	0	200	10	50
DTB143E	0.5	5	0.1	3	0.3	20	0.1	0.3	50	2.5	1.8	5	0.5	50	0	0.3	5	0.25	8.0	10	0	200	10	50
DTB123Y	0.3	5	0.1	2	0.3	20	0.1	0.3	50	2.5	3.6	5	0.5	50	0	0.3	5	0.25	8.2	10	0	200	10	50
DTB122J	0.3	5	0.1	2	0.3	30	0.1	0.3	50	2.5	4.5	5	0.5	50	0	0.3	5	0.25	8.0	10	0	200	10	50
DTB133H	0.3	5	0.1	2	0.3	20	0.1	0.3	50	2.5	2.4	5	0.5	50	0	0.3	5	0.25	7.7	10	0	200	10	50

BASIC PART NUMBER	BV _{CEO}		BV _{CB0}		BV _{EBO}		I _{CB0} Max. (μA)	V _{CB} (V)	I _{EBO} Max. (μA)	V _{EB} (V)	V _{CE(sat)}			Cob@F=1MHz			CUT-OFF FREQ		
	Min. (V)	I _c (mA)	Min. (V)	I _c (μA)	Min. (V)	I _E (μA)					Max. (V)	I _c (mA)	I _B (mA)	Typ. (pF)	V _{CB} (V)	I _E (mA)	f _T (MHz)	V _{CE} (V)	I _c (mA)
DTB123T	40	1	50	50	5	50	0.5	50	0.5	4	0.3	50	2.5	6.9	10	0	200	10	50
DTB143T	40	1	50	50	5	50	0.5	50	0.5	4	0.3	50	2.5	7.5	10	0	200	10	50
DTB163T	40	1	50	50	5	50	0.5	50	0.5	4	0.3	50	2.5	7.2	10	0	200	10	50
DTB114T	40	1	50	50	5	50	0.5	50	0.5	4	0.3	50	2.5	6.7	10	0	200	10	50

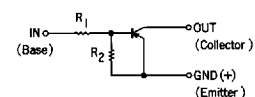
ELECTRICAL CHARACTERISTICS : 100 mA Series

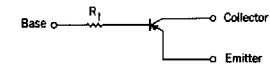
BASIC PART NUMBER	RESISTOR VALUE		R2/R1			Ic Max. (mA)	INPUT VOLT		G1 Min.	Vo (V)	Io (mA)	PART MARK	EQUIVALENT CIRCUIT
	R1 (kΩ)	R2 (kΩ)	Min.	Typ.	Max.		Min. (V)	Max. (V)					
DTA113Z	1.0	10.0	8	10	12	100	-10	5	33	5	5	E11/111	
DTA114E	10.0	10.0	0.8	1	1.2	100	-40	10	30	5	5	14	
DTA114W	10.0	4.7	0.37	0.47	0.57	100	-30	10	24	5	10	74	
DTA114Y	10.0	47.0	3.7	4.7	5.7	100	-40	6	68	5	5	54	
DTA115E	100.0	100.0	0.8	1	1.2	100	-40	10	82	5	5	19	
DTA115U	100.0	10.0	0.08	0.1	0.12	100	-40	40	27	5	5	E79/179	
DTA123E	2.2	2.2	0.8	1	1.2	100	-12	10	20	5	20	12	
DTA123J	2.2	47.0	17	21	26	100	-12	5	80	5	10	E32/132	
DTA123Y	2.2	10.0	3.6	4.5	5.5	100	-12	5	33	5	10	52	
DTA124E	22.0	22.0	0.8	1	1.2	100	-40	10	56	5	5	15	
DTA124X	22.0	47.0	1.7	2.1	2.6	100	-40	10	68	5	5	35	
DTA143E	4.7	4.7	0.8	1	1.2	100	-30	10	20	5	10	13	
DTA143X	4.7	10.0	1.7	2.1	2.6	100	-20	7	30	5	10	33	
DTA143Y	4.7	22.0	3.7	4.7	5.7	100	-30	6	56	5	5	53	
DTA143Z	4.7	47.0	8	10	12	100	-30	5	80	5	10	E13/113	
DTA144E	47.0	47.0	0.8	1	1.2	100	-40	10	68	5	5	16	
DTA144V	47.0	10.0	0.17	0.21	0.26	100	-40	15	33	5	5	E56/156	
DTA144W	47.0	22.0	0.37	0.47	0.57	100	-40	10	56	5	5	76	
DTA214Y	10.0	47.0	3.7	4.7	5.7	100	-40	6	68	5	5	N14	
DTA1D3R	2.7	1.0	0.29	0.37	0.45	100	-15	15	20	5	30	K3B	

BASIC PART NUMBER	RESISTOR VALUE		VcBo Max. (V)	VcEo Max. (V)	VcBo Max. (V)	Ic Max. (mA)	hFE			VcE (V)	Ic (mA)	PART MARK	EQUIVALENT CIRCUIT
	R1 (kΩ)	R2 (kΩ)					Min.	Typ.	Max.				
DTA143T	4.7	NONE	50	50	5	100	100	250	600	5	1	93	
DTA144T	10.0	NONE	50	50	5	100	100	250	600	5	1	94	
DTA124T	22.0	NONE	50	50	5	100	100	250	600	5	1	95	
DTA144T	47.0	NONE	50	50	5	100	100	250	600	5	1	96	
DTA115T	100.0	NONE	50	50	5	100	100	250	600	5	1	99	
DTA125T	200.0	NONE	50	50	5	100	100	250	600	5	1	9A	
DTA113T	1.0	NONE	50	50	5	100	100	250	600	5	1	91	

BASIC PART NUMBER	RESISTOR VALUE		VcBo Max. (V)	VcEo Max. (V)	VcBo Max. (V)	Ic Max. (mA)	hFE			VcE (V)	Ic (mA)	PART MARK	EQUIVALENT CIRCUIT
	R1 (kΩ)	R2 (kΩ)					Min.	Typ.	Max.				
DTA114G	0	10.0	50	50	5	100	30	-	-	5	5	K14	
DTA124G	0	22.0	50	50	5	100	56	-	-	5	5	K15	
DTA144G	0	47.0	50	50	5	100	68	-	-	5	5	K16	
DTA115G	0	100.0	50	50	5	100	82	-	-	5	5	K19	
DTB114G	0	10.0	50	50	5	500	56	-	-	5	100	L14	

ELECTRICAL CHARACTERISTICS : 500 mA Series

BASIC PART NUMBER	RESISTOR VALUE		R2/R1			Ic Max. (mA)	INPUT VOLT		G1 Min.	Vo (V)	Io (mA)	PART MARK	EQUIVALENT CIRCUIT
	R1 (kΩ)	R2 (kΩ)	Min.	Typ.	Max.		Min. (V)	Max. (V)					
DTB113E	1.0	1.0	0.8	1	1.2	500	-10	10	33	5	50	F11	
DTB113Z	1.0	10.0	8	10	12	500	-10	5	56	5	50	G11	
DTB114E	10.0	10.0	0.8	1	1.2	500	-40	10	56	5	50	F14	
DTB123E	2.2	2.2	0.8	1	1.2	500	-12	10	39	5	50	F12	
DTB143E	4.7	4.7	0.8	1	1.2	500	-30	10	47	5	50	F13	
DTB123Y	2.2	10.0	3.6	4.5	5.5	500	-12	5	56	5	50	F52	
DTB122J	0.22	4.7	17.1	21.3	25.6	500	-5	5	47	5	50	G3C	
DTB133H	3.3	10.0	2.4	3	3.7	500	-20	6	56	5	50	G98	

BASIC PART NUMBER	RESISTOR VALUE		VcBo Max. (V)	VcEo Max. (V)	VcBo Max. (V)	Ic Max. (mA)	hFE			VcE (V)	Ic (mA)	PART MARK	EQUIVALENT CIRCUIT
	R1 (kΩ)	R2 (kΩ)					Min.	Typ.	Max.				
DTB123T	2.2	NONE	50	40	5	500	100	250	600	5	50	F92	
DTB143T	4.7	NONE	50	40	5	500	100	250	600	5	50	F93	
DTB163T	6.8	NONE	50	40	5	500	100	250	600	5	50	F97	
DTB114T	10.0	NONE	50	40	5	500	100	250	600	5	50	F94	