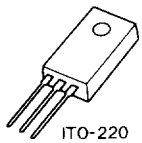
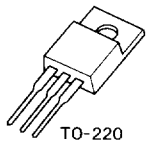
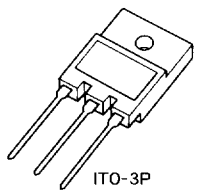
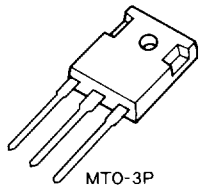
Darlington Transistors

Darlington Power Transistors


ITO-220


TO-220

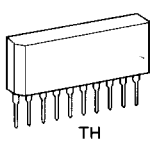

ITO-3P

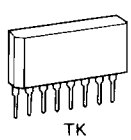

MTO-3P

Bipolar transistors

Type No.	Absolute Maximum Ratings								Electrical Characteristics									Outline	
EIAJ No.	V_{CBO} [V]	V_{CEO} [V]	V_{EBO} [V]	I_C [A]	I_B [A]	P_T [W]	Tstg [℃]	T_j [℃]	V_{CEO} (sus) (min) [V]	h_{FE} (min)	V_{CE} (sat) (max) [V]	V_{BE} (sat) (max) [V]	θ_{jc} (max) [℃/W]	f_T (typ) [MHz]	ton (max) [μs]	ts (max) [μs]	tf (max) [μs]	Package	Fig.
2SD1022	100	100	7	5	0.5	30	−55 ~ 150	150	—	1500	1.5	2	4.17	20	2	5	3	TO-220	80-3
1023	200	200														8	5		
1024	100	100	7	8	0.5	50		150	—	1500	1.5	2	2.5	20	2	5	3		
1025	200	200														8	5		
1026	100	100	7	15	1	100		150	—	1500	1.5	2	1.25	20	2	5	3	MTO-3P	86-2
1027	200	200														8	5		
2196						65							1.92			12		ITO-3P	88-3
1349	500	400	12	7	0.5	50		150	400	150	1.5	2	2.5	10	2	12	9	TO-220	80-3
1788	100	100	7	±4	0.3	25		150	—	1500	1.5	2	5.0	20	2	12	5	ITO-220	82-4
1789	200	200																	
1790	60±10	60±10																	
1791	100	100	7	7	0.5	30		150	—	1500	1.5	2	4.16	20	2	12	5		
1792	200	200																	
1793	100	100	7	10	0.5	50		150	—	1500	1.5	2	2.5	20	2	12	5		
1794	200	200																	
1795	500	400	12	10	0.5	50		150	400	150	1.5	2	2.5	10	2	15	15		
2SB1282	−100	−100	−7	±4	−0.3	25	−55 ~ 150	150	—	1500	−1.5	−2	5	20	1	4	2	ITO-220	82-4
1283				−7	−0.5	30							4.16						
1284				−10	−0.8	35							3.57						
1285				−15	−1	100							1.25					MTO-3P	86-2
1448						65							1.92					ITO-3P	88-3

Transistor Arrays


TH


TK

Bipolar transistor Arrays

Type No.	Absolute Maximum Ratings								Electrical Characteristics							Remarks	Outline	
	V_{CBO} [V]	V_{CEO} [V]	V_{EBO} [V]	I_C [A]	I_B [A]	P_T [W]	Tstg [℃]	T_j [℃]	h_{FE} (min)	V_{CE} (sat) (max) [V]	V_{BE} (sat) (max) [V]	θ_{ja} (max) [℃/W]	ton (max) [μs]	ts (max) [μs]	tf (max) [μs]		Package	Fig.
TH3L10	100	100	7	±3	0.3	3.5	−55~150	150	1500	1.5	2	35	2	8	3	NPN×4	TH	65
3L20	200	200																
3C10	±100	±100	±7	±3	±0.3					±1.5	±2					NPN×2, PNP×2		
3J10	−100	−100	−7	±3	−0.3					−1.5	−2					PNP×4		
3L10Z*	60±10	60±10	7	±3	0.3					1.5	2					NPN×4		
5L10	100	100	7	5	0.5					1.5	2		2	8	3	NPN×4		
5L20	200	200													5			
TK3L10	100	100	7	±3	0.3	2.5	−55~150	150	1500	1.5	2	50	2	8	3	NPN×3	TK	66
3L20	200	200																
3J10	−100	−100	−7	±3	−0.3					−1.5	−2					PNP×3		
3L10Z*	60±10	60±10	7	±3	0.3					1.5	2					NPN×3		
5L10	100	100	7	5	0.5					1.5	2		2	8	3	NPN×3		
5L20	200	200													5			
TH5P4	±60	±40	±7	±5	±1.5	3.5	−55~150	150	70	−0.3	±1.2	35.7	0.3	2	0.5	NPN×2, PNP×2	TH	65

※ : With zener diode between collector and base