

SYMBOLS & CODES EXPLAINED

6. "P" Channel 7. "N" Channel — SILICON FIELD EFFECT TRANSISTORS

LINE No.	TYPE No.	1 MAX. DEVICE DISS @ 25°C (W)	2 MAX. Id=0 (V)	3 MAX. Vds (V)	4 ABS. MAX. BVdss (V)	ABS. MAX. RATINGS @ 25°C		7 MAX. Idss @ Vgs=0 (A)	8 MAX. Igss @ Vgs>Vp (A)	TEST COND.		PARAMETERS @ 25°C		13 Rds (Ω)	14 MAX. Cis (F)	15 IN. FREE AIR W/C (°C)	16 STRUC. TURE	17 DWG. # Y200 s/s TO200 Ser.	18 # C A D E
						Id (A)	Ig (A)			Vgs (V)	Vds (V)	gfs (mhos)	Yos (mhos)						

▼ - Matched Type, also listed in Section 13, Category 6
 ◆ - Phototransistor, also listed in Section 13, Category 7 (See Above Also)

△ - With infinite heat sink
 † - Above 25°C; For additional information, consult manufacturer.

† - VGS (Cut Off)
 △ - VGS (Threshold)
 % - Typical
 # - Minimum

△ - Depletion Mode, Type A
 § - Depletion-Enhancement Mode, Type B
 * - Enhancement Mode, Type C

△ - BV DSO
 † - BV DSX

△ - BV DGO

△ - Typical § - gfg
 † - Pulsed
 % - High Frequency (Vfs)
 □ - YFS

△ - Yis § - Yog
 † - Not given test conditions
 % - Maximum
 * - Pulsed

△ - VGD
 † - VDG

% - Maximum
 △ - Not given at test conditions
 † - RDS(on) at VDS = 0

∅ - ID in mA

△ - I GDO

△ - IDSS @ VGS = 0 and VDS ≈ Vp
 ∅ - VGS > 0
 # - Minimum
 * - Typical
 % - Pulsed

- Ciss (Output Shorted)
 △ - C dgs
 † - C gss
 % - Not given at test conditions
 * - Typical
 □ - C dss
 ∅ - C dgo § - C igs

STRUCTURE
 D - Diffused
 E - Epitaxial
 Ge - GermaniumPE
 PE - Planar Epitaxial
 PL - Planar
 # - Junction Type
 * - Insulated Gate (MOS Type)
 § - Matched pair or dual
 △ - Switching, other uses
 % - Chopper, Other uses
 † - Noise figure 8db or below
 H - Hometaxial
 § - Tetrode
 % - Insulated Gate (MNOS Type)

A - Ambient J - Junction
 C - Case S - Storage

□ - Phototransistor Device
 △ - Tetrode Device
 % - Composite Type

8. GERMANIUM PNP 9. GERMANIUM NPN 10. SILICON PNP 11. SILICON NPN — High Power Transistors

LINE No.	TYPE No.	1 MIN. DERATE J to C W/C	2 MAX. FREE AIR @ 25°C (W)	3 Pcm X M P	ABSOLUTE MAX. RATINGS @ 25°C				9 MAX. Icbo @ 25°C (A)	10 MAX. Vcb (V)	11 BIAS Ic (A)	12 MIN. fce (Hz)	13 MAX. fce (Hz)	14 MAX. SAT. RES. (Ω)	15 tr (s)	16 STRUC. TURE	17 DWG. # Y200 s/s TO200 Ser.	18 # C A D E
					Ic (A)	Ib (A)	BVcbo (V)	BVceo (V)										

† - 40°C ◆ - 80°C
 * - 45°C § - 100°C
 # - 50°C ∅ - Free Air
 □ - 60°C ∅ - Typical Value
 § - 75°C △ - > 100°C
 Symbols indicate temperature at which derating starts.

∅ - With infinite heat sink
 Following symbols indicate temp at which derating starts:
 † - 40°C □ - 60°C ◆ - 80°C
 * - 45°C § - 70°C △ - Pulsed
 # - 50°C § - 100°C % - Min.

* - 50-65°C A - Ambient
 ∅ - 70-80°C C - Case
 # - 85-100°C J - Junction
 ◆ - 110-125°C C - Case
 † - 130-135°C S - Storage
 § - 140-165°C
 § - 170-200°C
 ▼ - Over 200°C

∅ - IE § - Minimum
 # - Pulsed or Peak
 † - At temperature 25°C Case

∅ - At VCB < Max. VCB (see mfr. spec.)
 # - ICEX * - Icer △ - ICeO
 § - ICES ◆ - At Temp. 25°C Case
 § - Typical † - At Temp. > 25°C

- BV CEX or punch-through
 ∅ - BV CES * - Pulsed
 § - BV CER □ - BV ceo(SUS)
 § - Minimum

† - At Temp. 25°C Case
 § - Minimum

∅ - IE
 # - Pulsed
 § - Minimum

† - hfe * - Available to selected range narrower than indicated
 # - Pulsed
 ∅ - Typical

□ - Maximum
 ∅ - td + tr = Ton
 § - ts
 # - tf
 † - ts + tf = Toff
 * - Ton + Toff

▼ - Typical Value # - Pulsed

- Rated max. operating frequency
 † - fcb
 § - Gain bandwidth product (fr)
 * - Maximum frequency of oscillation
 ∅ - Figure of merit (frequency for unity power gain)
 △ - Minimum □ - Maximum

§ - Tetrode
 # - Radiation Resistant Device (Also see top of reverse side of card.)

11. SILICON NPN - HIGH POWER TRANSISTORS

IN ORDER OF (1) MIN. DERATING FACTOR
& (2) TYPE No.

LINE No.	TYPE No.	MIN. DERATE J to C	MAX FREE AIR @ 25°C	Pc	M A E X M P	ABSOLUTE MAX. RATINGS @25°C					MAX. hFE		f _{ae}	MAX. SAT. RES. (Ω)	tr (s)	STRUCTURE	DWG #	CODE			
						lc	lb	BVcbo	BVebo	BVceo	lcbo	V _{cb}							MIN	MAX	
						(A)	(A)	(V)	(V)	(V)	(A)	(V)							(A)	(A)	
1#	BLY25	300m#	30	0	5.0		120	8.0	80	50uΔ	5.0	2.0	100	300	70MΔ	300m		DPE	T059		
2#	BLY26	300m#	30	0	5.0		100	8.0	60	50uΔ	5.0	2.0	40	#	70MΔ	300m		DPE	T059		
3#	CP430	300m#	30	0	5.0		100	8.0	60	10uΔ	5.0	2.0	40	120 #	140MΔ			DPE	T03	CØ	
4#	CP431	300m#	30	0	5.0		100	8.0	60	10uΔ	5.0	2.0	100	300 #	150MΔ			DPE	T03	CØ	
5#	CP432	300m#	30	0	5.0		120	8.0	80	10uΔ	5.0	2.0	40	120 #	140MΔ			DPE	T03	CØ	
6#	CP433	300m#	30	0	5.0		120	8.0	80	10uΔ	5.0	2.0	100	300 #	150MΔ			DPE	T03	CØ	
7#	CP657	300m	30	0	5.0		120	6.0	100	10uΔ	5.0	2.0	25	95 Ø	50MΔ		400nØ	PE	T03	H	
8	SDT1641	300m	52	0	5.0	1.0	60	20	40	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
9	SDT1642	300m	52	0	5.0	1.0	80	20	60	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
10	SDT1643	300m	52	0	5.0	1.0	100	20	80	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
11	SDT1644	300m	52	0	5.0	1.0	125	20	100	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
12	SDT1645	300m	52	0	5.0	1.0	150	20	125	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
13	SDT1646	300m	52	0	5.0	1.0	175	20	150	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
14	SDT1647	300m	52	0	5.0	1.0	200	20	175	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
15	SDT1648	300m	52	0	5.0	1.0	225	20	200	10u	5.0	1.0	20	60	2.5MΔ	500m	400n	PL	T066	CØ	
16	SDT1651	300m	52	0	5.0	1.0	60	20	40	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
17	SDT1652	300m	52	0	5.0	1.0	80	20	60	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
18	SDT1653	300m	52	0	5.0	1.0	100	20	80	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
19	SDT1654	300m	52	0	5.0	1.0	125	20	100	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
20	SDT1655	300m	52	0	5.0	1.0	150	20	125	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
21	SDT1656	300m	52	0	5.0	1.0	175	20	150	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
22	SDT1657	300m	52	0	5.0	1.0	200	20	175	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
23	SDT1658	300m	52	0	5.0	1.0	225	20	200	10u	5.0	1.0	40	120	2.5MΔ	500m	400n	PL	T066	CØ	
24	SDT1661	300m	52	0	5.0	1.0	60	20	40	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
25	SDT1662	300m	52	0	5.0	1.0	80	20	60	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
26	SDT1663	300m	52	0	5.0	1.0	100	20	80	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
27	SDT1664	300m	52	0	5.0	1.0	125	20	100	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
28	SDT1665	300m	52	0	5.0	1.0	150	20	125	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
29	SDT1666	300m	52	0	5.0	1.0	175	20	150	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
30	SDT1667	300m	52	0	5.0	1.0	200	20	175	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
31	SDT1668	300m	52	0	5.0	1.0	225	20	200	10u	5.0	1.0	80		2.5MΔ	500m	400n	PL	T066	CØ	
32	SDT7711	300m	55	0	15	3.0	60	20	40	10u	5.0	5.0	20	80	5.0M			PL	T0111		
33	SDT7712	300m	55	0	15	3.0	80	20	60	10u	5.0	5.0	20	80	5.0M			PL	T0111		
34	SDT7713	300m	55	0	15	3.0	100	20	80	10u	5.0	5.0	20	80	5.0M			PL	T0111		
35	SDT7714	300m	55	0	15	3.0	120	20	100	10u	5.0	5.0	20	80	5.0M			PL	T0111		
36	SDT7715	300m	55	0	15	3.0	140	20	125	10u	5.0	5.0	20	80	5.0M			PL	T0111		
37	SDT7716	300m	55	0	15	3.0	165	20	150	10u	5.0	5.0	20	80	5.0M			PL	T0111		
38	A522	303mØ	45	0	5.0	1.0	60	6.0	35	50uØ	0.0	1.5	30	100	80MΔ			PE	T03	DØ	
39	A523	303mØ	45	0	5.0	1.0	90	6.0	60	50uØ	0.0	1.5	30	100	80MΔ			PE	T03	DØ	
40#	3TE230	322m	48	0	4.0	1.5	80	4.0	80	10u	5.0	1.5	10	#	60	1.0M†	200m	1.5u	DPE	MS3	
41	2N1657	333m	50	0	5.0	1.0	60	3.0	40	5.0M	5.0	1.0	15					PE	T03		
42#	2SC736	333m	50	0	5.0	1.0	135	5.0	60	500n	10	1.0	25	70 Ø				PE	T03		
43#	2SC1259	333mØ	50	0	6.0	3.6	4.0	18	2.0MØ	10	3.0	15	#		125MΔ			PE	MT87	S	
44#	2SD26	333m	50	0	7.0	4.0	5.0	30	100uØ	4.0	5.0	5.0	100					PE	T03	CØ	
45#	2SD26A	333m	50	0	7.0	6.0	5.0	40	100uØ	4.0	5.0	5.0	100					PE	T03	CØ	
46#	2SD26B	333m	50	0	7.0	100	5.0	60	100uØ	4.0	5.0	5.0	100					PE	T03	CØ	
47#	2SD26C	333m	50	0	7.0	150	5.0	80	100uØ	4.0	5.0	5.0	100					PE	T03	CØ	
48	3TX003	333m	53	0	5.0	1.0	100	5.0	80	10m	5.0	5.0	10		150k	400m		PE	T03	CØ	
49	3TX004	333m	53	0	5.0	1.0	60	3.0	50	10m	5.0	5.0	10		150k	400m	400nØ	PE	T03	CØ	
50	1718-1805†	333m\$	33	0	5.0	#	2.0 #	180	7.0	180	200u#	2.0	5.0	20		40MΔ	120m	400nØ	EM	T0111	G
51	B3547	333m	30	0	5.0			60	8.0	40	1.0uØ	1.0	100	20	60	500m		PE	T059		
52	B3548	333m	30	0	5.0			80	8.0	60	1.0uØ	1.0	100	20	60	500m		PE	T059		
53	B3549	333m	30	0	5.0			100	8.0	80	1.0uØ	1.0	100	20	60	500m		PE	T059		
54	B3550	333m	30	0	5.0			60	8.0	40	1.0uØ	1.0	100	40	120	500m		PE	T059		
55	B3551	333m	30	0	5.0			80	8.0	60	1.0uØ	1.0	100	40	120	500m		PE	T059		
56	B3552	333m	30	0	5.0			100	8.0	80	1.0uØ	1.0	100	40	120	500m		PE	T059		
57	B3553	333m	30	0	5.0			60	8.0	40	1.0uØ	1.0	100	40	120	500m		PE	T059		
58	B3554	333m	30	0	5.0			80	8.0	60	1.0uØ	1.0	100	40	120	500m		PE	T059		
59	B3555	333m	30	0	5.0			100	8.0	80	1.0uØ	1.0	100	40	120	500m		PE	T059		
60	B3556	333m	20	0	5.0			90	8.0	60	100nØ	1.0	100	40	120	20MΔ	250m	PE	T059		
61	B3557	333m	20	0	5.0			120	8.0	80	100nØ	1.0	100	40	120	20MΔ	250m	PE	T059		
62	B3558	333m	20	0	5.0			150	8.0	100	100nØ	1.0	100	40	120	20MΔ	250m	PE	T059		
63	B3559	333m	30	0	5.0			60	7.0	40	100nØ	1.0	100	20	60	30MΔ	250m	PE	T059		
64	B3560	333m	30	0	5.0			80	8.0	60	100nØ	1.0	100	20	60	30MΔ	250m	PE	T059		
65	B3561	333m	30	0	5.0			100	8.0	80	100										

SYMBOLS & CODES EXPLAINED

SYMBOLS & CODES COMMON TO MORE THAN ONE TECHNICAL SECTION

LINE No.
 ▼ - New Type
 ♦ - Revised Specifications
 # - Non-JEDEC type manufactured outside U.S.A.

TYPE No.
 † - Switching type, also listed in Section 12
 ∅ - Chopper, also listed in Section 13, Category 10
 * - These types also included elsewhere with other characteristics. See Type No. Cross Index for alternate line number.
 § - Radiation Resistant Devices, also listed in Section 13, Category 13.

STRUCTURE (All Sections Except 6 & 7)

- A - Alloy
- AN - Annular
- D - Diffused or drift
- DM - Diffused mesa
- E - Epitaxial
- EA - Epitaxial annular
- EM - Epitaxial mesa
- F - Fused
- G - Grown
- GA - Gallium Arsenide
- H - Hometaxial
- MA - Mico alloy
- MD - Micro alloy diffused
- ME - Mesa
- MOS - Metal oxide silicon
- PA - Precision alloy
- PC - Point contact
- PD - Precision alloy diffused
- PE - Planar epitaxial
- PL - Planar
- S - Surface barrier
- * - Matched pair
- △ - Switching, other uses
- ∅ - Chopper, other uses
- ∅ - Noise figure 8db or below
- † - Plastic package
- ∅ - Overlay

12. SWITCHING TRANSISTORS * THESE TYPES ALSO INCLUDED ELSEWHERE WITH OTHER CHARACTERISTICS SEE TYPE NO. CROSS INDEX FOR ADDITIONAL PAGE & LINE NO.

LINE No.	TYPE No.	fab (Hz)	MAX RISE TIME tr (s)	MAX DELAY TIME td (s)	MAX STORE TIME ts (s)	MAX FALL TIME tf (s)	MAX. P _c IN FREE AIR @ 25°C (W)	BIAS			MAX. SAT. RES. (Ω)	C _{ob} (F)	r _{bb} X C _{ob} (s)	STRUCTURE	DESCRIPTION	L C O A D E
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		

† - $f \alpha_e$
 § - Gain bandwidth product (f_T)
 * - Maximum frequency of oscillation
 ∅ - Figure of merit (frequency for unity power gain)
 △ - Minimum ▢ - Maximum

§ - Charge storage time constant
 ▼ - Stored base charge - picocoulomb
 ♦ - Total switching time
 ∅ - $T_{on} = t_r + t_d$
 † - Typical Value

∅ - $T_{off} = t_s + t_f$
 † - Typical Value
 * - $T_{on} + T_{off} = t_d + t_r + t_f + t_s$

∅ - V_{CE}
 ∅ - I_C
 △ - I_B
 † - h_{fe}
 # - Pulsed
 △ - Minimum
 ▢ - Maximum
 * - Available to selected range narrower than indicated
 § - Y_{fs} in millimho (FET's only). Bias values are V_{DS} & I_D
 ∅ - With infinite heat sink
 Following symbols indicate temperature at which derating starts:
 † - 40°C § - 70°C
 * - 45°C ♦ - 100°C or greater
 # - 50°C ∅ - 80°C
 ▢ - 60°C △ - Pulsed

† - r'_{bb}
 ▢ - Maximum
 § - C_{cb}
 § - C_{iss} (FET's only)

§ - Tetrode
 N - NPN or "N" Channel
 P - PNP or "P" Channel
 § - Field Effect Transistor
 # - Radiation Resistant Device (See above also)

A - Ambient
 C - Case
 J - Junction
 S - Storage

13. MISCELLANEOUS TRANSISTORS

LINE No.	TYPE No.	CATEGORY	STRUCTURE	MATERIAL	DWG. No.	L C O A D E	DESCRIPTION
1	2	3	4	5	6	7	8

- 1 - Avalanche Mode
- 2 - Bi-directional
- 3 - Field Effect
- 4 - Hook Collector
- 5 - Complementary Symmetry (PNP & NPN) Matched Pair
- 6 - Matched Pair
- 7 - Phototransistor
- 8 - Tetrode
- 9 - Unijunction: N-N-type emitter (P-type Base) P-P-type emitter (N-type Base)
- 10 - Chopper
- 11 - Unmatched Composite (Dual)
- 12 - Cryogenic
- 13 - Radiation Resistant Devices
- 14 - Pressure Sensitive
- 15 - Transistor chips
- 16 - Darlington
- 17 - Microwave

Ge - Germanium
 Si - Silicon

N - NPN or N Channel
 P - PNP or P Channel (See above also)

See "TECHNICAL TERM DEFINITIONS" Section

12. SWITCHING TRANSISTORS

IN ORDER OF (1) fab, (2) MAX RISE TIME & (3) TYPE No.

LINE No.	TYPE No.	1 fab (Hz)	2 MAX RISE TIME tr (s)	MAX DELAY TIME td (s)	MAX STORE TIME ts (s)	MAX FALL TIME tf (s)	MAX. Pc IN FREE AIR @ 25°C (W)	BIAS			MAX. SAT. RES. (Ω)	Cob (F)	r'bb X Cob (s)	STRUCTURE P-PNP N-PNP	M A T	MAX. TEMP (°C)	DWG # Y200 s/a TO200 Ser.	L E A D E
								Vcb (V)	Ic (A)	hFE								
1#	DAT2	25.0MΔ	30n			70n	30m	500m	50m	40 Δ	6.0p		P-MA	Ge	75J	TO1		
2#	MA393E	25.0MΔ	30n			75n	30m	500m	50m	40 Δ	6.0p		P-MA	Ge	75J	TO1		
3#	2SA248	25.0M	30n				125m	1.0	200m	50	3.5p	600n	P-D	Ge	75J	TO44		
4	2N3148	25.0MΔ	80n				25m*	500m	50m	60 Δ	6.0		P	Ge	100S	TO24		
5	2N1608	25.0MΔ	235n		235n		100m	5.0	15m	6.0 Δ			P	Ge	140S	TO5		
6	1843-3510	25MΔ	500n		1.5u		85	5.0	10	15 #Δ	600p		N-EM	Si	200J	TO3	CØ	
7	1843-3520	25MΔ	500n		1.5u	1.0u	85	5.0	20	10 #Δ	600p		N-EM	Si	200J	TO3	CØ	
8	1843-3705	25MΔ	500n		1.5u	1.0u	85	5.0	5.0	20 #Δ	600p		N-EM	Si	200J	TO3	CØ	
9	1843-3710	25MΔ	500n		1.5u	1.0u	85	5.0	10	15 #Δ	600p		N-EM	Si	200J	TO3	CØ	
10	1843-3720	25MΔ	500n		1.5u	1.0u	85	5.0	20	10 #Δ	600p		N-EM	Si	200J	TO3	CØ	
11	2N496/18	28.8MΔ	175n				150m	5.0	15m	15 Δ	12p	1.5n	P-S	Si	140S	TO18		
12	2N643	30.0M	10n	80n	6.0n	80n	120m	7.0	5.0m	45 †	2.0p		P-A	Ge	71A	TO9	AØ	
13	2N745	30.0M	50n		20n	80n	150m	5.0	10m	35	1.4p		N-PD	Si	175J	u2		
14	2N907	30.0M	50n		20n	80n	150m	5.0	10m	35	1.4p		N-PD	Si	175J	u10		
15	MM4547	30MΔ	50n	30n	400n	60n	25	10	500m	20 #Δ	60p		P-AN	Si	200J	TO37	AØ	
16	MM4647	30MΔ	50n	30n	400n	60n	5.0	10	500m	20 #Δ	60p		P-AN	Si	200J	TO39	AØ	
17	2N2225	30.0M	100n		100n	100n	200m	5.0	400m	60 †	1.2		P-A	Ge	85C	TO5		
18	1743-0810	30MΔ	300n		500n	300n	85	2.0	10	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
19	1743-1210	30MΔ	300n		500n	300n	85	2.0	10	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
20	1743-1610	30MΔ	300n		500n	300n	85	2.0	10	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
21	1743-0820	30MΔ	450n		550n	350n	85	2.5	20	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
22	1743-1020	30MΔ	450n		550n	350n	85	2.5	20	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
23	1743-1420	30MΔ	450n		550n	350n	85	2.5	20	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
24	1763-1820	30MΔ	450n		550n	350n	85	2.5	20	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
25	1768-1820	30MΔ	450n		550n	350n	100	2.5	20	20 Δ#	800p		N-E	Si	200J	TO63	A	
26	1743-0830	30MΔ	500n		600n	400n	85	3.0	30	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
27	1743-1230	30MΔ	500n		600n	400n	85	3.0	30	20 #Δ	800p		N-E	Si	200J	TO3	CØ	
28	1743-1630	30MΔ	500n		600n	400n	150	3.0	30	20 Δ#	800p		N-EM	Si	200J	TO3	CØ	
29	1748-1630	30MΔ	500n		600n	400n	175	3.0	30	20 Δ#	800p		N-EM	Si	200J	TO63	A	
30	1748-1830	30MΔ	500n		600n	400n	175	3.0	30	20 Δ#	800p		N-EM	Si	200J	TO63	A	
31	1743-1820	30MΔ	600n		550n	350n	100	4.0	30	12 Δ#	800p		N-E	Si	200A	TO3	CØ	
32	1748-1820	30MΔ	600n		550n	350n	114	4.0	30	12 Δ#	800p		N-E	Si	200A	TO63	A	
33	1743-1830	30MΔ	700n		600n	400n	100	4.0	40	10 Δ#	800p		N-E	Si	200A	TO3	CØ	
34	2N1384	35.0M	80n	20n	250n	100n	240m	5.0	200m	50			P-D	Ge	85A	TO11	A	
35#	2SA327	35.0M	80n		1.2u	400n	80m	1.0	80m	30			P-D	Ge	85A	TO44		
36	2N866	40.0MΔ	80n		150n	100n	500m	1.0	150m	15 Δ	40	2.5p	N	Si	300S	TO18		
37	TN51	40.0M	45n	15n	200n	40n	5.0m	5.0	1.0m	45	500m		N-PE	Si	200J	MT26		
38	TN71	40.0M	45n	15n	200n	40n	500u	5.0	1.0m	45	500m		N-PE	Si	200J	TO5		
39	MM4545	40MΔ	50n	30n	400n	60n	25	10	500m	20 #Δ	80p		P-AN	Si	200J	TO37	AØ	
40	MM4546	40MΔ	50n	30n	400n	60n	25	10	500m	20 #Δ	80p		P-AN	Si	200J	TO37	AØ	
41	MM4645	40MΔ	50n	30n	400n	60n	5.0	10	500m	20 #Δ	80p		P-AN	Si	200J	TO39	AØ	
42	MM4646	40MΔ	50n	30n	400n	60n	5.0	10	500m	20 #Δ	80p		P-AN	Si	200J	TO39	AØ	
43	2SA478	40.0M	85n		85n	250n	125m	1.0	400m	150	1.5		P-D	Ge	85J	TO1	A	
44	NPC12-1A	40MΔ	100n		1.0u	1.0u	25	5.0	50m	20 Δ			N-PL	Si	200J	TO66	CØ	
45	NPC12-2	40MΔ	100n		1.0u	1.0u	25	5.0	50m	20 Δ			N-PL	Si	200J	TO66	CØ	
46	NPC13-1A	40MΔ	100n		1.0u	1.0u	50	5.0	100m	20 Δ			N-PL	Si	200J	TO3	CØ	
47	NPC13-2	40MΔ	100n		1.0u	1.0u	50	5.0	100m	20 Δ			N-PL	Si	200J	TO3	CØ	
48	NPC14-1A	40MΔ	100n		1.0u	1.0u	100	5.0	100m	20 Δ			N-PL	Si	200J	TO3	CØ	
49	NPC14-2	40MΔ	100n		1.0u	1.0u	100	5.0	100m	20 Δ			N-PL	Si	200J	TO3	CØ	
50	2N1660	40.0M	110n		1.7u	1.4u	85m	15	1.0	80	4.0		N-PD	Si	200J	MS3		
51	2N1661	40.0M	110n		1.7u	1.4u	85m	15	1.0	80	4.0		N-PD	Si	200J	MS3		
52	2N1662	40.0M	110n		1.7u	1.4u	85m	15	1.0	80	4.0		N-PD	Si	200J	MS3		
53	2N1896	40.0M	110n		1.7u	1.4u	85m	15	1	80	4.0		N-D	Si	200J	MT16		
54	2N1897	40.0M	110n		1.7u	1.4u	85m	15	1	80	4.0		N-D	Si	200J	MT16		
55	2N1898	40.0M	110n		1.7u	1.4u	85m	15	1	80	4.0		N-D	Si	200J	MT16		
56	TIP14	40MΔ	150n		600n	2.0	5.0	200m	30 †Δ	.60 #			P-E	Si	150	X43		
57	TN301	40.0M	150n	50n	700n	200n	30	1.0	50m	25	125p		N-PE	Si	200A	MT47		
58	TN302	40.0M	150n	50n	700n	200n	30	1.0	50m	25	400m		N-PE	Si	200A	MT47		
59	TN303	40.0M	150n	50n	700n	200n	30	1.0	50m	25	250m		N-PE	Si	200A	MT47		
60	USA55191/36	40.0MΔ	150n		600n	2.3	4.0	150m	25 Δ#	.28	45p		P	Si	200J			
61	2N1252A	40MΔ	230n		150n	800m	10	150m	45 Δ	.10			N	Si	200J	TO5	AØ	
62	1716-0402	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
63	1716-0602	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
64	1716-0802	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
65	1716-1002	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
66	1716-1202	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
67	1716-1402	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
68	1716-1602	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
69	1716-1802	40MΔ	300n		600n	300n	87	2.0	2.0	20	250p		N-EM	Si	200J	TO61	A	
70	1714-1805	40MΔ	400n		600n	300n	25	5.0	20 Δ#		250p		N-E	Si	200J	TO66	CØ	
71	1716-0405	40MΔ	400n		600n	300n	87	2.0	5.0	20	250p		N-EM	Si	200J	TO61	A	
72	1716-0605	40MΔ	400n		600n	300n	87	2.0	5.0	20	250p		N-EM	Si	200J	TO61	A	
73	1716-0805	40MΔ	400n		600n	300n	87	2.0	5.0	20	250p		N-EM	Si	200J	TO61	A	
74	1716-1005	40MΔ	400n		600n	300n	87	2.0	5.0	20	250p		N-EM	Si	200			