MIL-STD-701M
9 JUN 1986
SUPERSEDING
MIL-STD-701L
19 JUNE 1980

MILITARY STANDARD

LISTS OF STANDARD SEMICONDUCTOR DEVICES

AMSC N/A FSC 5961

DEPARTMENT OF DEFENSE

WASHINGTON, D.C. 20301

Lists of Standard Semiconductor Devices.

1. This military standard is approved for use by all Departments and Agencies of the Department of Defense.

2. Beneficial comments (recommendations, corrections, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Director, Space and Naval Warfare Systems Command, Department of the Navy, ATTN: SPAWAR 8111, Washington, DC 20363 by using the self-addressed standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

CONTENTS

TABLES

1. SCOPE

1.1 Purpose. The purpose of this standard is as follows:

a. To provide equipment designers and manufacturers with lists of semiconductor devices considered to be standard for military applications.

b. To control and minimize the variety of semiconductor devices used by military activities in order to facilitate effective logistic support of equipment in the field; to maximize economic support of, and to concentrate improvement on, production of the semiconductor devices listed in this standard.

1.2 Scope. This standard establishes the requirements for the selection of semiconductor devices used in the design and manufacture of military equipment.

2. REFERENCED DOCUMENTS

2.1 Government documents.

2.1.1 Specifications. The following specification, forms a part of this specification to the extent specified herein. Unless otherwise specified, the issues of these documents shall be those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation.

SPECIFICATIONS

MILITARY

MIL-S-19500 - Semiconductor Devices, General Specification for.

(Copies of the specification, required by contractors in connection with specific acquisition functions should be obtained from the contracting activity or as directed by the contracting activity.)

3. DEFINITIONS

3.1 The terms used in this standard are defined in MIL-S-19500.

4. GENERAL REQUIREMENTS

4.1 Selection of semiconductor devices. Semiconductor device types must be selected from those types listed in this standard. The variety of semiconductor devices used in any military equipment shall be the minimum necessary to provide satisfactory performance.

4.2 Use of semiconductor devices.

4.2.1 Controlled characteristics. Satisfactory equipment performance shall depend only on a semiconductor device characteristic which is controlled by the applicable MIL-S-19500 detail specification.

4.2.2 Correlation of circuit requirements and detail specification test conditions. When an application condition varies widely from the detail specification test condition(s), it shall be the responsibility of the contractor to establish satisfactory correlation between the circuit requirements and the detail specification requirements.

4.3 Criteria for inclusion in this standard.

a. The semiconductor device shall be considered by representatives of the military departments, the best available type for current application.

b. Continued availability of the semiconductor device shall be reasonably certain.

c. The semiconductor device shall have an approved military specification.

4.4 Lists of semiconductor devices. Tables included herein list the ratings and primary electrical characteristics and applicable specification number for all semiconductor devices approved as standard for use in the design and manufacture of military equipment. (Complete detailed requirements for semiconductor devices listed in this standard are covered in the applicable detail specification.) All devices listed herein are silicon types except for the devices listed in table XIV and XV.

4.4.1 TX and TXV types. Only the JANTX and JANTXV versions of semiconductor device types listed herein are approved for use. The prefix JANTX is used on devices which have been submitted to and have passed special process-conditioning, testing and screening and the prefix JANTXV is used on devices which have been submitted to a visual precap inspection in addition to the process-conditioning, testing and screening.

4.4.1.1 Dash one (-1) parts. Where dash one (-1) parts are available on the detail specification and listed on QPL-19500, they shall be considered to be the preferred types.

4.4.2 Reverse polarity types. The reverse polarity versions of semiconductor device types listed herein, are also approved for use.

4.5 Conflict of data. In the event of conflict between the technical description of semiconductor devices listed in this standard and the applicable specification, the specification shall govern.

5. DETAILED REQUIREMENTS (not applicable).

6. NOTES.

6.1 International standardization agreements. Certain provisions of this standard are the subject of international standardization agreement NATO Electronic Parts Recommendation (NEPR) 19. When revision or cancellation of this standard is proposed which will affect or violate the international agreement concerned, the preparing activity will take appropriate reconciliatory action through international standardization channels, including departmental standardization offices, if required.

6.2 Parameter values. Every reasonable effort is made to insure that this standard lists the most recent parameter values for the devices listed. However, users are cautioned to verify all values against the current revision of the applicable detail specification.

6.3 Qualified products list. Some of the device types listed in this standard may not be listed on QPL-19500. The preparing activity may be contacted to obtain the up-to-date status of the QPL. (See procedures and notes in QPL-19500.)

6.4 Subject terms (key word) listing.
Semiconductor device
Diode
Rectifier
Transistor
Thyristor

TABLE I. Switching diodes (listed in order of increasing trr).

Device type no.	Time t_{rr} (max) (ns)	V_{RWM} *(Vdc) (Vpk)	V_F at I_F (V)	I_F (mA)	I_R at V_{RWM} at 25°C (μA)	I_R at V_{RWM} at T_A 150°C (μA)	I_F to I_R	C (max) (pF)	JEDEC outline 1/	Specification MIL-S-19500/
1N4454-1	4.0	50	1.0	10	0.1	100	$I_F = I_R = 10$ mA	2.0	D035	144
1N4153-1	4.0	50	0.880	20	0.05	50	$I_F = I_R = 10$ mA	2.0	D035	337
1N4150-1	4.0	50	1.0	200	0.1	100	$I_F = I_R = 10$ mA to 200 mA	2.5	D035	231
1N4148-1	5.0	75	1.0	10	0.5	100	$I_F = I_R = 10$ mA	4.0	D035	116
1N4938-1	50.0	175	1.0	100	0.1	100	$I_F = I_R = 10$ mA	5.0	D035	169
1N5711 2/	3/	50	1.0	15	0.2	200			D035	444
1N5712 2/	3/	16	1.0	35	0.15	100			D035	445
1N5719 4/	5/	*100	1.0	100	0.25	15		0.3	D035	443

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ Schottky barrier type.
3/ Minority carrier lifetime equals 100 picoseconds, max.
4/ PIN type.
5/ Effective carrier lifetime equals 100 ns, min.

TABLE II. Axial-lead power rectifiers.

Device type no.	V_{RWM} (Vpk)	Maximum V_{FM} at I_F *(Vpk) (V dc)	*(Apk) (A dc)	Maximum I_R at V_{RWM} at 25°C (μA dc)	at T_A 100°C (μA dc)	Maximum I_o at 55°C FWD I 1 cyc avg (A dc)	Maximum T_{op} (°C)	JEDEC outline 1/	Specification MIL-S-19500/
1N5551	400	*1.2	*9 2/	1.0	75	3.0	175	DO204	420
1N5552	600	*1.2	*9 2/	1.0	75	3.0	175	DO204	420
1N5553	800	*1.3	*9 2/	1.0	75	3.0	175	DO204	420
1N5554	1000	*1.3	*9 2/	1.0	75	3.0	175	DO204	420
1N5616	400	1.2	1	0.5	25	1.0	200	DO204	427
1N5618	600	1.2	1	0.5	25	1.0	200	DO204	427
1N5620	800	1.2	1	0.5	25	1.0	200	DO204	427
1N5622	1000	1.2	1	0.5	25	1.0	200	DO204	427

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ Duty cycle ≤ 2 percent, t_p = 1/120 s.

TABLE III. Fast-recovery rectifiers (listed in order of t_{rr}.)

Device type no.	Recovery time t_{rr} (ns)	V_{RWM} (V)	I_O at T_A 55°C *T_C 100°C (A)	I_{FSM} at 1/120 s (A)	Max reverse current at rated V_R at I_R T_A 25°C (μA)	Max reverse current at rated V_R at I_R T_A 150°C *T_C 100°C (μA)	JEDEC outline 1/	Specification MIL-S-19500/
1N5804	25	100	1	35	1.0		Axial	477
1N5806	25	150	1	35	1.0		Axial	477
1N5809	30	100	3	125	5.0		Axial	477
1N5811	30	150	3	125	5.0		Axial	477
1N5814	35	100	*20	250	10.0	500	2/ D04	478
1N5816	35	150	*20	250	10.0	500	2/ D04	478
1N6304	50	50	70	1000	25.0		2/ D05	550
1N6305	50	100	70	1000	25.0		2/ D05	550
1N6306	50	150	70	1000	25.0		2/ D05	550
1N5615	150	200	1	25	0.5	25	Axial	429
1N5417	150	200	3	50	1.0	20	Axial	411
1N5617	150	400	1	25	0.5	25	Axial	429
1N5418	150	400	3	50	1.0	20	Axial	411
1N3891	200	200	*12	150	25.0	*3000	2/ D04	304
1N3911	200	200	*30	300	80.0	*10000	2/ D05	308
1N3893	200	400	*12	150	25.0	*3000	2/ D04	304
1N3913	200	400	*30	300	80.0	*10000	2/ D05	308
1N5419	250	500	3	50	1.0	20	Axial	411
1N5619	250	600	1	25	0.5	25	Axial	429
1N5621	300	800	1	25	0.5	25	Axial	429
1N5420	400	600	3	50	1.0	20	Axial	411
1N5623	500	1000	1	25	0.5	25	Axial	429

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ Straight and reverse polarity types available.

TABLE IV. Power rectifers (listed in order of maximum DC output current).

Device type no.	I_O at T_C 150°C (A dc)	V_{RWM} (Vpk)	I_{FSM} at 1/120 s (A)	Maximum I_R at V_{RWM}		JEDEC outline 1/,2/	Specification MIL-S-19500/
				at T_C 25°C	T_C 150°C		
1N1202A	12	200	240	50 µA	1 mA	D04	260
1N1204A	12	400	240	50 µA	1 mA	D04	260
1N1206A	12	600	240	50 µA	1 mA	D04	260
1N3671A	12	800	240	50 µA	1 mA	D04	260
1N3673A	12	1000	240	50 µA	1 mA	D04	260
1N1186	35	200	500	250 µA	3 mA	D05	297
1N1188	35	400	500	250 µA	3 mA	D05	297
1N1190	35	600	500	250 µA	3 mA	D05	297
1N3766	35	800	500	250 µA	3 mA	D05	297
1N3768	35	1000	500	250 µA	3 mA	D05	297

1/ Mechanical configuration of devices are equal or similar to referenced JEDEC outlines.
2/ Straight and reverse types available.

TABLE V. Schottky power rectifiers.

Device type no.	V_{RWM} (Vpk)	Maximum V_{FM} at I_{FM} *(Vpk)	*(Apk)	Maximum I_R at V_{RWM} at 25°C (mA pk)	at T_A 175°C (mA pk)	Maximum I_O T_C = 125 *T_C = 115 A dc	Maximum T_{op} (°C)	JEDEC outline	Specification MIL-S-19500/
1N6391	45	.68	50	15	400	22.5	175	D04	553
1N6392	45	.82	120	20	600	*54.0	175	D05	554

TABLE VI. High-voltage rectifier assemblies (listed in order of increasing reverse voltage).

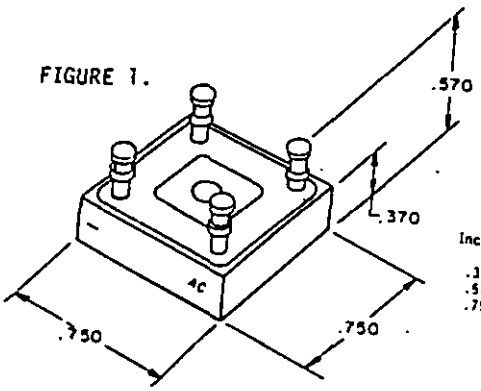
Device type no.	V_{RWM}	V_F (V dc)	I_O (max) at T_A		I_{FSM} at 1/120 s	T_A	Maximum I_R at V_{RWM} at T_A 25°C	Outline	Specification MIL-S-19500/
			(mA)	°C	(A)	(°C)	(μA)		
1N3644	1500	5.0	250	25	14	25	5	1/	279
1N3645	2000	5.0	250	25	14	25	5	1/	279
1N3646	2500	5.0	250	25	14	25	5	1/	279
1N3647	3000	5.0	250	25	14	25	5	1/	279

1/ Cylindrical .315 inch X .090 inch maximum.

TABLE VII. High current, full wave, bridge rectifiers
Listed in order of increasing I_O.

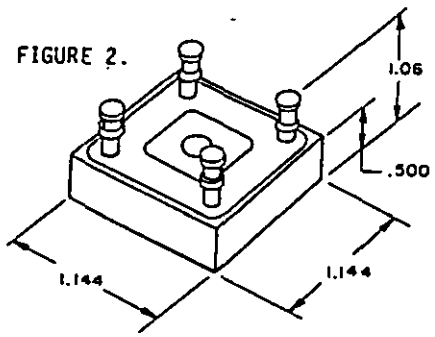
Phase	Device type no.	I_O at T_C = 55°C *T_L = 55°C (A)	I_{FSM} t_p = 8.3 ms at T_C = 55°C *T_L = 55°C (A) (pk)	Maximum reverse current T_A at 25°C I_R at V_R (μA)	(V)	Case style	Specification MIL-S-19500/
Single	M19500/469-01	10	100	2	200	figure 1	469
Single	M19500/469-02	10	100	2	400		469
Single	M19500/469-03	10	100	2	600		469
Single	SPA25	25	150	2	100	figure 2	446
Single	SPB25	25	150	2	200		446
Single	SPC25	25	150	2	400		446
Single	SPD25	25	150	2	600		446
Three	M19500/483-01	25	150	2	200	figure 3	483
Three	M19500/483-02	25	150	2	400		483
Three	M19500/483-03	25	150	2	600		483

FIGURE 1.



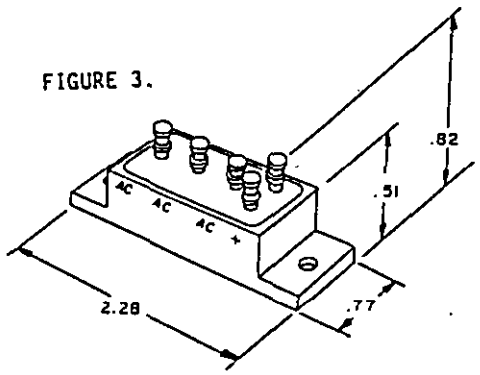
Inches	mm
.370	9.39
.570	14.48
.750	19.05

FIGURE 2.



Inches	mm
.500	12.70
1.06	26.9
1.144	29.06

FIGURE 3.



Inches	mm
.51	12.9
.77	19.5
.82	20.4
2.28	57.9

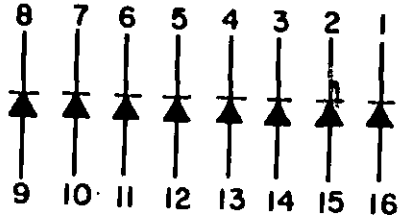
NOTES:

1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Dimensions are nominal.

TABLE VIII. Multiple diode arrays (individual diode ratings).

Device type no.	I_O T_A = 25°C (mAdc)	I_{FSM} t_p=1s (Adc)	V_F at I_F (Vdc)	V_F at I_F (mAdc)	I_R at V_R (μAdc)	I_R at V_R (Vdc)	t_{rr} (ns)	C_T (pF)	Outline and schematic 1/	Specification MIL-S-19500/
1N6101	200	1.0	1.0	100	.025	20	5	3	DIP	517

1/ Schematic configuration appears on bottom of this page.



1N6101

TABLE IX. Voltage reference diodes (listed in order of voltage range).

Device type no.	Reference voltage range $V_{(BR)}$ Min (V)	Reference voltage range $V_{(BR)}$ Max (V)	Voltage temp stability $\Delta V_{(BR)}$ (V)	Dynamic impedance Z (ohms)	Dynamic impedance at Z (mA)	Max temp (°C)	JEDEC outline 1/	Specification MIL-S-19500/
1N821-1	5.90	6.50	0.096	15	7.5	175	DO7	159
1N823-1	5.90	6.50	0.048	15	7.5	175	DO7	159
1N825-1	5.90	6.50	0.019	15	7.5	175	DO7	159
1N827-1	5.90	6.50	0.009	15	7.5	175	DO7	159
1N829-1	5.90	6.50	0.005	15	7.5	175	DO7	159
1N4565A	6.08	6.72	0.100	200	0.5	175	DO7	452
1N4566A	6.08	6.72	0.050	200	0.5	175	DO7	452
1N4567A	6.08	6.72	0.020	200	0.5	175	DO7	452
1N4568A	6.08	6.72	0.010	200	0.5	175	DO7	452
1N4569A	6.08	6.72	0.005	200	0.5	175	DO7	452
1N4570A	6.08	6.72	0.100	100	1.0	175	DO7	452
1N4571A	6.08	6.72	0.050	100	1.0	175	DO7	452
1N4572A	6.08	6.72	0.020	100	1.0	175	DO7	452
1N4573A	6.08	6.72	0.010	100	1.0	175	DO7	452
1N4574A	6.08	6.72	0.005	100	1.0	175	DO7	452
1N3154	8.00	8.80	0.130	15	10.0	175	DO7	158
1N3155	8.00	8.80	0.065	15	10.0	175	DO7	158
1N3156	8.00	8.80	0.026	15	10.0	175	DO7	158
1N3157	8.00	8.80	0.013	15	10.0	175	DO7	158
1N935B-1	8.55	9.45	0.184	20	7.5	175	DO7	156
1N937B-1	8.55	9.45	0.037	20	7.5	175	DO7	156
1N938B-1	8.55	9.45	0.018	20	7.5	175	DO7	156
1N939B 2/	8.55	9.45	0.009	20	7.5	175	DO7	156
1N940B 3/	8.55	9.45	0.0037	20	7.5	175	DO7	156
1N941B	11.12	12.28	0.239	30	7.5	175	DO7	157
1N943B	11.12	12.28	0.047	30	7.5	175	DO7	157
1N944B	11.12	12.28	0.024	30	7.5	175	DO7	157
1N945B	11.12	12.28	0.012	30	7.5	175	DO7	157

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

2/ When qualified delete the 1N939B and substitute the 1N939B-1.

3/ When qualified delete the 1N940B and substitute the 1N940B-1.

TABLE X. Voltage regulator diodes.

V_Z (nom) (Vdc)	Device type no. (listed by P_T)							
	Specification MIL-S-19500/							
	127	117	435	406	356	272 2/	124 2/	114 2/
	400 mW Axial	400 mW Axial	400mW Axial	1.5 W Axial	5 W 1/ Axial	10 W DO4	10 W DO4	50 W TO3
1.8			1N4614-1					
2.0			1N4615-1					
2.2			1N4616-1					
2.4	1N4370A-1		1N4617-1					
2.7	1N4371A-1		1N4618-1					
3.0	1N4372A-1		1N4619-1					
3.3	1N746A-1		1N4620-1					
3.6	1N747A-1		1N4621-1					
3.9	1N748A-1		1N4622-1			1N3993A		1N4557
4.3	1N749A-1		1N4623-1			1N3994A		1N4558
4.7	1N750A-1		1N4624-1			1N3995A		1N4559
5.1	1N751A-1		1N4625-1			1N3996A		1N4560
5.6	1N752A-1		1N4626-1		1N5968	1N3997A		1N4561
6.2	1N753A-1		1N4627-1	1N4460	1N5969	1N3998A		1N4562
6.8	1N754A-1		1N4099-1	1N4461	1N4954	1N3999A	1N2970B	1N2804B
7.5	1N755A-1		1N4100-1	1N4462	1N4955	1N4000A	1N2971B	1N2805B
8.2	1N756A-1		1N4101-1	1N4463	1N4956		1N2972B	1N2806B
8.7			1N4102-1					
9.1	1N757A-1		1N4103-1	1N4464	1N4957		1N2973B	1N2807B
10.0	1N758A-1		1N4104-1	1N4465	1N4958		1N2974B	1N2808B
11.0		1N962B-1	1N4105-1	1N4466	1N4959		1N2975B	1N2809B
12.0	1N759A-1	1N963B-1	1N4106-1	1N4467	1N4960		1N2976B	1N2817B
13.0		1N964B-1	1N4107-1	1N4468	1N4961		1N2977B	1N2811B
14.0			1N4108-1					
15.0		1N965B-1	1N4109-1	1N4469	1N4962		1N2979B	1N2813B
16.0		1N966B-1	1N4110-1	1N4470	1N4963		1N2980B	1N2814B
17.0			1N4111-1					
18.0		1N967B-1	1N4112-1	1N4471	1N4964		1N2982B	1N2816B
19.0			1N4113-1					
20.0		1N968B-1	1N4114-1	1N4472	1N4965		1N2984B	1N2818B
22.0		1N969B-1	1N4115-1	1N4473	1N4966		1N2985B	1N2819B
24.0		1N970B-1	1N4116-1	1N4474	1N4967		1N2986B	1N2820B
25.0			1N4117-1					
27.0		1N971B-1	1N4118-1	1N4475	1N4968		1N2988B	1N2822B
28.0			1N4119-1					
30.0		1N972B-1	1N4120-1	1N4476	1N4969		1N2989B	1N2823B
33.0		1N973B-1	1N4121-1	1N4477	1N4970		1N2990B	1N2824B
36.0		1N974B-1	1N4122-1	1N4478	1N4971		1N2991B	1N2852B
39.0		1N975B-1		1N4479	1N4972		1N2992B	1N2826B
43.0		1N976B-1		1N4480	1N4973		1N2993B	1N2827B
47.0		1N977B-1		1N4481	1N4974		1N2995B	1N2829B
51.0		1N978B-1		1N4482	1N4975		1N2997B	1N2831B

See footnotes at end of table.

TABLE X. Voltage regulator diodes - Continued.

E_Z (nom) (V dc)	Device type no. (listed by P_T)							
	Specification MIL-S-19500/							
	127	117	435	406	356	272 2/	124 2/	114 2/
	400 mW Axial	400 mW Axial	400 mW Axial	1.5 W Axial	5 W 1/ Axial	10 W DO4	10 W DO4	50 W TO3
56.0		1N979B-1		1N4483	1N4976		1N2999B	1N2832B
60.0								
62.0		1N980B-1		1N4484	1N4977		1N3000B	1N2833B
68.0		1N981B-1		1N4485	1N4978		1N3001B	1N2834B
75.0		1N982B-1		1N4486	1N4979		1N3002B	1N2835B
82.0		1N983B-1		1N4497	1N4980		1N3003B	1N2836B
87.0								
91.0		1N984B-1		1N4483	1N4981		1N3004B	1N2837B
100.0				1N4489	1N4982		1N3005B	1N2838B
110.0				1N4490	1N4983		1N3007B	1N2840B
120.0				1N4491	1N4984		1N3008B	1N2841B
130.0				1N4492	1N4985		1N3009B	1N2842B
150.0				1N4493	1N4986		1N3011B	1N2843B
160.0				1N4494	1N4987		1N3012B	1N2844B
180.0				1N4495	1N4988		1N3014B	1N2845B
200.0				1N4496	1N4989		1N3015B	1N2846B
220.0					1N4990			
240.0					1N4991			
270.0					1N4992			
300.0					1N4993			
330.0					1N4994			
360.0					1N4995			
390.0					1N4996			

1/ T_2 = 75°C, L = 0.375 in.
2/ Reverse polarity device types available.

TABLE XI. Voltage-variable capacitor diodes (listed in order of nominal capacitance).

Device type no.	C_T at V_R		Cap. ratio from $V_R(1)$ to $V_R(2)$ (max)			V_{RWM}	$V_{(BR)}$ at I_R		I_F (max)	P_T (max)	Q (min)	Conditions		JEDEC outline 1/	Specification MIL-S-19500/
	(pF)	(V dc)		(V dc)	(V dc)	(V)	(V dc)	(μA dc)	(mA dc)	(mW)		Freq (MHz)	V_R (V dc)		
1N5139A	6.8	4	2.7	4.0	60	60	65	10		400	350	50	4	D07	383
1N5461B	6.8	4	3.1	2.0	30	30	30	10		400	600	50	4	D07	436
1N5462B	8.2	4	3.1	2.0	30	30	30	10		400	600	50	4	D07	436
1N5140A	10.0	4	2.8	4.0	60	60	65	10		400	300	50	4	D07	383
1N5463B	10.0	4	3.1	2.0	30	30	30	10		400	550	50	4	D07	436
1N5141A	12.0	4	2.8	4.0	60	60	65	10		400	300	50	4	D07	383
1N5464B	12.0	4	3.1	2.0	30	30	30	10		400	550	50	4	D07	436
1N5142A	15.0	4	2.8	4.0	60	60	65	10		400	250	50	4	D07	383
1N5465B	15.0	4	3.1	2.0	30	30	30	10		400	550	50	4	D07	436
1N5143A	18.0	4	2.8	0.1	60	60	65	10		400	250	50	4	D07	383
1N5466B	18.0	4	3.1	2.0	30	30	30	10		400	500	50	4	D07	436
1N5467B	20.0	4	3.1	2.0	30	30	30	10		400	500	50	4	D07	436
1N5144A	22.0	4	3.2	4.0	60	60	65	10		400	200	50	4	D07	383
1N5468B	22.0	4	3.2	2.0	30	30	30	10		400	500	50	4	D07	436
1N5145A	27.0	4	3.2	4.0	60	60	65	10		400	200	50	4	D07	383
1N5469B	27.0	4	3.2	2.0	30	30	30	10		400	500	50	4	D07	436
1N5146A	33.0	4	3.2	4.0	60	60	65	10		400	200	50	4	D07	383
1N5470B	33.0	4	3.2	2.0	30	30	30	10		400	500	50	4	D07	436
1N5147A	39.0	4	3.2	4.0	60	60	65	10		400	200	50	4	D07	383
1N5471B	39.0	4	3.2	2.0	30	30	30	10		400	450	50	4	D07	436
1N5148A	47.0	4	3.2	4.0	60	60	65	10		400	200	50	4	D07	383
1N5472B	47.0	4	3.2	2.0	30	30	30	10		400	400	50	4	D07	436
1N5473B	56.0	4	3.3	2.0	30	30	30	10		400	500	50	4	D07	436
1N5474B	68.0	4	3.3	2.0	30	30	30	10		400	250	50	4	D07	436
1N5475B	82.0	4	3.3	2.0	30	30	30	10		400	225	50	4	D07	436
1N5476B	100.0	4	3.3	2.0	30	30	30	10		400	200	50	4	D07	436

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XII. Current regulator diodes (P_T = 600 mW).

Device type no.	I_P Regulator current (mA) at V_T = 25 V ±10% (Nom)	Z_T Minimum dynamic impedance at V_T = 25 V (mΩ)	Z_K Minimum knee impedance at V_K = 6 V (mΩ)	V_L Maximum limiting voltage at I_L = 0.8 I_P (min) (Volts)	$T_C I_P$ Maximum regulator current T_C at V_T = 25 V -55°C +25°C (%/°C)	$T_C I_P$ Maximum regulator current T_C at V_T = 25 V 25°C +150°C (%/°C)	JEDEC outline 1/	Specification MIL-S-19500/
1N5283	0.22	25.0	2.75	1.00	+1.35	-0.06, +0.70	DO7	463
1N5284	0.24	19.0	2.35	1.00	+1.25	-0.10, +0.66	DO7	463
1N5285	0.27	14.0	1.95	1.00	-0.10, +1.15	-0.12, +0.58	DO7	463
1N5286	0.30	9.0	1.60	1.00	-0.15, +1.05	-0.15, +0.52	DO7	463
1N5287	0.33	6.6	1.35	1.00	-0.20, +0.95	-0.16, +0.47	DO7	463
1N5288	0.39	4.10	1.00	1.05	-0.30, +0.82	-0.20, +0.38	DO7	463
1N5289	0.43	3.30	0.870	1.05	-0.32, +0.75	-0.22, +0.33	DO7	463
1N5290	0.47	2.70	0.750	1.05	-0.35, +0.70	-0.23, +0.28	DO7	463
1N5291	0.56	1.90	0.560	1.10	-0.40, +0.55	-0.26, +0.20	DO7	463
1N5292	0.62	1.55	0.470	1.13	-0.42, +0.45	-0.27, +0.15	DO7	463
1N5293	0.68	1.35	0.400	1.15	-0.45, +0.40	-0.28, +0.12	DO7	463
1N5294	0.75	1.15	0.335	1.20	-0.50, +0.35	-0.30, +0.07	DO7	463
1N5295	0.82	1.00	0.290	1.25	-0.52, +0.27	-0.31, +0.03	DO7	463
1N5296	0.91	0.880	0.240	1.29	-0.56, +0.20	-0.32	DO7	463
1N5297	1.00	0.800	0.205	1.35	-0.58, +0.15	-0.34	DO7	463
1N5298	1.10	0.700	0.180	1.40	-0.60, +0.10	-0.36	DO7	463
1N5299	1.20	0.640	0.155	1.45	-0.63, +0.05	-0.37	DO7	463
1N5300	1.30	0.580	0.135	1.50	-0.65	-0.38	DO7	463
1N5301	1.40	0.540	0.115	1.55	-0.68	-0.39	DO7	463
1N5302	1.50	0.510	0.105	1.60	-0.70	-0.40	DO7	463
1N5303	1.60	0.475	0.092	1.65	-0.70	-0.40	DO7	463
1N5304	1.80	0.420	0.074	1.75	-0.72	-0.41	DO7	463
1N5305	2.00	0.395	0.061	1.85	-0.75	-0.42	DO7	463
1N5306	2.20	0.370	0.052	1.95	-0.76	-0.42	DO7	463
1N5307	2.40	0.345	0.044	2.00	-0.78	-0.43	DO7	463
1N5308	2.70	0.320	0.035	2.15	-0.80	-0.43	DO7	463
1N5309	3.00	0.300	0.029	2.25	-0.81	-0.43	DO7	463
1N5310	3.30	0.280	0.024	2.35	-0.82	-0.44	DO7	463
1N5311	3.60	0.265	0.020	2.50	-0.83	-0.44	DO7	463
1N5312	3.90	0.255	0.017	2.60	-0.84	-0.45	DO7	463
1N5313	4.30	0.245	0.014	2.75	-0.85	-0.45	DO7	463
1N5314	4.70	0.235	0.012	2.90	-0.86	-0.45	DO7	463

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XIII. Transient suppressor diodes (bidirectional).

MIL-S-19500/516

Series type		Breakdown voltage $V_{(BR)}$		Working peak voltage $V_{M(wkg)}$ 1/	Maximum peak surge voltage V_{SM}		Maximum peak surge current I_{SM}	
		Min	Max 1/		2/	3/	2/	3/
500 W	1500 W	V dc	V dc	V dc	V(pk)	V(pk)	A(pk)	A(pk)
1N6103A	1N6139A	7.13	7.87	5.7	11.2	11.2	44.6	133.9
1N6104A	1N6140A	7.79	8.61	6.2	12.1	12.1	41.3	124.0
1N6105A	1N6141A	8.65	9.55	6.9	13.4	13.4	37.3	111.9
1N6106A	1N6142A	9.50	10.50	7.6	14.5	14.5	34.5	103.4
1N6107A	1N6143A	10.45	11.55	8.4	15.6	15.6	32.0	96.2
1N6108A	1N6144A	11.40	12.60	9.1	16.9	16.9	29.6	88.8
1N6109A	1N6145A	12.35	13.65	9.9	18.2	18.2	27.5	82.4
1N6110A	1N6146A	14.25	15.75	11.4	21.0	21.0	23.8	71.4
1N6111A	1N6147A	15.20	16.80	12.2	22.3	22.3	22.4	67.3
1N6112A	1N6148A	17.10	18.90	13.7	25.1	25.1	19.9	59.8
1N6113A	1N6149A	19.0	21.0	15.2	27.7	27.7	18.0	54.2
1N6114A	1N6150A	20.9	23.1	16.7	30.5	30.5	16.4	49.2
1N6115A	1N6151A	22.8	25.2	18.2	33.3	33.3	15.0	45.0
1N6116A	1N6152A	25.7	28.3	20.6	37.4	37.4	13.4	40.1
1N6117A	1N6153A	28.5	31.5	22.8	41.6	41.6	12.0	36.0
1N6118A	1N6154A	31.4	34.6	25.1	45.7	45.7	10.9	32.8
1N6119A	1N6155A	34.2	37.8	27.4	49.9	49.9	10.0	30.1
1N6120A	1N6156A	37.1	40.9	29.7	53.6	53.6	9.3	28.0
1N6121A	1N6157A	40.9	45.1	32.7	59.1	59.1	8.5	25.4
1N6122A	1N6158A	44.7	49.3	35.8	64.6	64.6	7.7	23.2
1N6123A	1N6159A	48.5	53.5	38.8	70.1	70.1	7.1	21.4
1N6124A	1N6160A	53.2	58.8	42.6	77.0	77.0	6.5	19.5
1N6125A	1N6161A	58.9	65.1	47.1	85.3	85.3	5.9	17.6
1N6126A	1N6162A	64.6	71.4	51.7	97.1	97.1	5.1	15.4
1N6127A	1N6163A	71.3	78.7	56.0	103.1	103.1	4.8	14.5
1N6128A	1N6164A	77.9	86.1	62.2	112.8	112.8	4.4	13.3
1N6129A	1N6165A	86.5	95.5	69.2	125.1	125.1	4.0	12.0
1N6130A	1N6166A	95.0	105.0	76.0	137.6	137.6	3.6	10.9
1N6131A	1N6167A	104.5	115.5	86.6	151.3	151.3	3.3	9.9
1N6132A	1N6168A	114.0	126.0	91.2	165.1	165.1	3.0	9.1
1N6133A	1N6169A	123.5	136.5	98.8	178.8	178.8	2.8	8.4
1N6134A	1N6170A	142.5	157.5	114.0	206.3	206.3	2.4	7.3
1N6135A	1N6171A	152	168	121.6	218.4	218.4	2.3	6.9
1N6136A	1N6172A	171	189	136.8	245.7	245.7	2.0	6.1
1N6137A	1N6173A	190	210	152.0	273.0	273.0	1.8	5.5

1/ Applies to both 500 W and 1500 W series.
2/ Applies to only 500 W series.
3/ Applies to only 1500 W series.

TABLE XIII. Transient suppressor diodes (unidirectional) - Continued.

MIL-S-19500/551

Device type no.	Breakdown voltage $V_{(BR)}$ at I_{BR} Min	Working peak reverse voltage V_{RWM}	Test current t_p=300ms duty cycle $\leq 2\Delta$ I_{BR}	Maximum clamping voltage $V_{C(max)}$ at I_p for t_p = 1 ms	Maximum peak pulse current (I_p)	
					t_p = 20 µs t_r = 8 µs	t_p = 1 ms t_r = 10 µs
	V dc	V(pk)	mA dc	V(pk)	A(pk)	A(pk)
1N6461	5.6	5	25	9.0	315	56
1N6462	6.5	6	20	11.0	258	46
1N6463	13.6	12	5	22.6	125	22
1N6464	16.4	15	5	26.5	107	19
1N6465	27	24	2	41.4	69	12
1N6466	33	30.5	1	47.5	63	11
1N6467	43.7	40.3	1	63.5	45	8
1N6468	54	51.6	1	78.5	35	6

TABLE XIV. Light emitting diodes.

Device type no.	(mcd) (min)	(mcd) (typ)	Color	λ_d (nm) (typ)	C (pF) (max)	V_F (V dc) (max)	I_R (μA dc) (max)	JEDEC outline 1/	Specification MIL-S-19500/
1N6092	1.0	2.5	Red	626	35	3	1	TO18	519
M19500/519-02	1.0	2.5	Red	626	35	3	1		519
1N6093	1.0	2.5	Yellow	585	35	3	1	TO18	520
M19500/520-02	1.0	2.5	Yellow	585	35	3	1		520
1N6094	0.8	1.6	Green	570	35	3	1	TO18	521
M19500/521-02	0.8	1.6	Green	570	35	3	1		521

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XV. *Thyristors (silicon controlled rectifiers).*

Device type no.	I_O (amps) at T_C / T_A		Max ratings V_{DRM} 1/ (V)	I_{TSM} (surge) (amps)	t_{on} (µs)	t_{off} (µs)	dv/dt (V/µs)	V_{GT} (V dc)	I_{GT} (mA dc)	JEDEC outline 2/	Specification MIL-S-19500/
2N3027	0.175	100	30	8	0.2	2	30.0	.4/.8	0.20	TO18	419
2N3028	0.175	100	60	8	0.2	2	15.0	.4/.8	0.20	TO18	419
2N3029	0.175	100	100	8	0.2	2	10.0	.4/.8	0.20	TO18	419
2N2323AS	0.22	80	50	15			0.7	.35/.6	0.20	TO5	276
2N2324AS	0.22	80	100	15			0.7	.35/.6	0.20	TO5	276
2N2326AS	0.22	80	200	15			0.7	.35/.6	0.20	TO5	276
2N2328AS	0.22	80	300	15			0.7	.35/.6	0.20	TO5	276
2N2329S	0.22	80	400	15			1.8	.35/.8	0.20	TO5	276
2N1774A	4.7	105	200	60	5.0	30	5.0	2.0	15.0	TO64	168
2N1777A	4.7	105	400	60	5.0	30	5.0	2.0	15.0	TO64	168
2N685	16.0	65	200	150	5.0	30	20.0	3.0	35.0	TO48	108
2N688	16.0	65	400	150	5.0	30	20.0	3.0	35.0	TO48	108
2N690	16.0	65	600	150	5.0	40	20.0	3.0	35.0	TO48	108
2N692	16.0	65	800	150	5.0	60	20.0	3.0	35.0	TO48	108
2N1913	50.0	83	200	1000	15.0	40	20.0	3.0	70.0	TO94	204
2N1916	50.0	83	400	1000	15.0	40	20.0	3.0	70.0	TO94	204
2N1806	50.0	83	600	1000	15.0	40	20.0	3.0	70.0	TO94	204
2N1795	50.0	83	200	1000	15.0	40	20.0	3.0	70.0	TO83	204
2N1798	50.0	83	400	1000	15.0	40	20.0	3.0	70.0	TO83	204
2N1800	50.0	83	600	1000	15.0	40	20.0	3.0	70.0	TO83	204
2N3093	50.0	83	800	1000		40	20.0	3.0	70.0	TO94	280
2N3095	50.0	83	1000	1000		40	20.0	3.0	70.0	TO94	280
2N3097	50.0	83	1200	1000		40	20.0	3.0	70.0	TO94	280

1/ This parameter is identified at V_{FBXM} or V_{FBOM} in older specifications.
2/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XVI. Optical coupled isolators.

Device type no.	Diode				Transistor			Coupled				JEDEC outline 1/	Specification MIL-S-19500/
	V_R max	I_F max	V_F at I_F = 10 mA dc		V_{CEO} (max)	V_{EBO} (max)	h_{FE} V_{CE} = 5 V I_C = 10 mA dc	$I_{C(on)}$ V_{CE} = 5 V dc I_F = 1 mA dc		t_r	t_f		
			Min	Max				(Min)	(Max)				
	V dc	mA dc	V dc	V dc	V dc	V dc		mA dc	mA dc	µs	µs		
4N47	2	40	0.8	1.5	40	7	100	0.5	---	20	20	T099	548
4N48	2	40	0.8	1.5	40	7	100	1.0	5.0	20	20	T099	548
4N49	2	40	0.8	1.5	40	7	100	2.0	10.0	25	25	T099	548

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XVII. NPN low-power transistors ($P_C \leq 5$ watts at $T_A = 25°C$) (general purpose and switching).

NPN device type no.	f min/max (MHz)	P_T (mW)	Maximum ratings I_C (mA)	$V_{(BR)CBO}$ (V dc)	$V_{(BR)CEO}$ (V dc)	$V_{(BR)EBO}$ (V dc)	Primary electrical characteristics h_{fe} at I_C	(mA)	$V_{CE}(sat)$ at I_C (V dc)	(mA)	C_{obo} (pF)	NF (dB)	t_{on} (ns)	t_{off} (ns)	JEDEC outline 1/	Specification MIL-S-19500/	PNP complement 2/
2N3439	15/	800	1000	450	350	7.0	40/160	20.0	0.5	50	10.0		1000	1000	TO5	368	2N5416
2N3440	15/	800	1000	300	250	7.0	40/160	20.0	0.5	50	10.0		1000	1000	TO5	368	2N5415
2N5237	15/75	1500	10000	150	120	7.0	40/120	5000.0	0.6	5000	350.0			2000	TO5	394	
2N4150	15/75	1500	10000	100	70	7.0	40/120	5000.0	0.6	5000	350.0			2000	TO5	394	
2N5666	20/70	1200	5000	250	200	6.0	40/120	1000.0	0.4	3000	90.0		250	1500	TO5	455	
2N5667	20/70	1200	5000	400	300	6.0	25/75	1000.0	0.4	3000	90.0		250	2000	TO5	455	
2N3421	40/160	1000	3000	125	80	8.0	40/120	1000.0	0.25	1000	150.0		300	1200	TO5	393	
2N2484	60/210	360	50	60	60	6.0	200/500	0.01	0.3	1	5.0	2			TO18	376	
2N3507	60/240	1000	3000	80	50	5.0	30/150	1500.0	1.0	1500	40.0		45	90	TO5	349	2N3868
2N3019	100/400	800	1000	140	80	7.0	100/300	150.0	0.2	150	12.0	4	**	**	TO5	391	2N4033
2N3501	150/800	1000	300	150	150	6.0	100/300	150.0	0.4	150	8.0	6	115	1150	TO5	366	
2N2219A	*250/*	*800*	*800*	*75*	*50*	*6.0*	*100/300*	*150*	*1.0*	*500*	*8.0*		*35*	*300*	TO5	251	2N2905A
2N2222A	250/	500	800	75	50	6.0	100/300	150	1.0	500	8.0		35	300	TO18	255	2N2907A
2N5582	250/500	500	800	75	50	6.0	100/300	150.0	1.0	50	8.0		35	300	TO46	423	
2N3735	250/600	1000	1500	75	50	5.0	40/140	500.0	0.5	500	9.0			90	TO5	395	2N3763
2N3737	250/600	500	1500	75	50	5.0	40/140	500.0	0.5	500	9.0			90	TO46	395	2N3765
2N3013	350/1200	360	300	40	20	5.0	35/120	30.0	0.18	30	5.0		15	25	TO52	287	
2N2369A	500/	360		40	15	4.5	40/120	10.0	0.2	10	4.0		12	18	TO18	317	
2N4449	500/	300		40	15	4.5	40/120	10.0	0.2	10	4.0		12	18	TO46	317	
2N918 3/	600/	200	50	30	15	3.0	20/200	3.0	0.4	10	1.7	6			TO72	301	
2N3960	1300/2600	400		20	12	4.5	60/300	10.0	0.3	30	2.5				TO18	399	
2N3700	100/400	500	1000	140	80	7.0	50/200	500.0	0.2	150	12.0	4			TO18	391	
2N5154	70/	1000	2000	100	80	5.5	70/200	2500.0	1.5	5000	250.0		500	1500	TO39	544	2N5153

** $t_{on} + t_{off} = 30$ ns.

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ PNP complementary device types are listed in table XVIII. Some of these may not be exact complements, but are very similarly characterized.
3/ This type also listed in table XXI.

TABLE XVIII. PNP low-power transistors (PC ≤ 5 watts at TA = 25°C) (general purpose and switching).

PNP device type no.	f min/max (MHz)	P_T (mW)	Maximum ratings				Primary electrical characteristics								JEDEC outline 1/	Specification MIL-S-19500/	NPN complement 2/
			I_C (mA)	$V_{(BR)CBO}$ (V dc)	$V_{(BR)CEO}$ (V dc)	$V_{(BR)EBO}$ (V dc)	h_{FE} at I_C	(mA)	$V_{CE(sat)}$ at I_C (V dc)	(mA)	C_{obo} (pF)	NF (dB)	t_{on} (ns)	t_{off} (ns)			
2N5416	15/75	750	1000	350	300	6.0	30/120	50.0	2.0	50	15.0		1000.0	140.0	TO5	485	2N3439
2N2605	30/240	400	30	70	60	6.0	100/300	0.01	0.5	10	6.0				TO46	354	
2N3743	40/160	1000	50	300	300	5.0	50/200	30.0	1.2	30	15.0				TO39	397	2N3742
2N3868	60/240	1000	3000	60	60	4.0	30/150	1500.0	0.75	1500	120.0		100.0	400.0	TO5	350	2N3507
2N4033	150/600	800	1000	80	80	5.0	100/300	100.0	0.15	150	10.0		25.0	35.0	TO39	512	2N3019
2N3762	150/600	1000	1500	40	40	5.0	30/120	1000.0	0.5	500	15.0				TO39	396	
2N3764	150/600	500	1500	40	40	5.0	30/120	1000.0	0.5	500	15.0				TO46	396	
2N3467	175/500	1000	1000	40	40	5.0	40/120	500.0	0.6	500	25.0		40.0	90.0	TO5	348	
2N2905A	200/	600	600	60	60	5.0	100/300	150.0	1.6	500	8.0		45.0	200.0	TO5	290	2N2219A
2N2907A	200/	400	600	60	60	5.0	100/300	150.0	1.6	500	8.0		45.0	200.0	TO18	291	2N2222A
2N3637	200/850	1000	1000	175	175	5.0	100/300	50.0	0.9	50	10.0		400.0	600.0	TO5	357	
2N3486A	200/1000	400	600	60	60	5.0	100/300	150.0	1.6	500	8.0		45.0	200.0	TO46	392	
2N3251A	300/900	360	200	60	60	5.0	100/300	10.0	0.25	10	6.0	6	70.0	250.0	TO18	323	
2N4957 3/	1200/3600	200	30	30	30	3.0	30/150	5.0				3			TO72	426	
2N4261	2000/	200	30	15	15	4.5	30/150	10.0	0.15	1	2.5		2.5	3.5	TO72	511	2N3960
2N5153	70/	1000	2000	100	80	5.5	70/200	2500.0	1.5	5000	250.0		500.0	1500.0	TO39	545	2N5154

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ PNP complementary device types are listed in table XVII. Some of these may not be exact complements, but are very similarly characterized and are intended for such applications.
3/ This type also listed in table XXI.

TABLE XIX. NPN power transistors ($P_C \geq 5$ W) (listed in order of increasing power).

NPN device type no.	Maximum ratings						Primary electrical characteristics							JEDEC outline 1/	Specification MIL-S-19500/	PNP complement 2/
	P_T at T_C		I_C	$V_{(BR)CBO}$	$V_{(BR)CEO}$	$V_{(BR)EBO}$	h_{FE} at I_C		$V_{CE(sat)}$ at I_C		f	t_{on}	t_{off}			
	(W)	(°C)	(A)	(V dc)	(V dc)	(V dc)		(A)	(max)	(A)	(MHz)	(μs)	(μs)			
2N3739	10	100	3.0	325	300	6	40-200	0.1	2.5	0.25	10-60			TO66	402	
2N3767	25	25	4.0	100	80	6	40-160	0.5	1.0	0.5				TO66	518	
2N5664	30	100	5.0	250	200	6	40-120	1.0	0.4	3.0	20-70	0.25	1.5	TO66	455	
2N5665	30	100	5.0	400	300	6	25-75	1.0	0.4	3.0	20-70	0.25	2.0	TO66	455	
2N3597	30	100	5.0	100	80	8	80-240	1.0	2.0	5.0	40	0.3	2.0	TO111 3/	374	
2N2151	30	100	2.0	150	100	8	40-120	1.0	0.1-1.0	1.0	10-70			TO59	277	
2N2880	30	100	5.0	110	80	8	40-120	1.0	0.25	1.0	20-120	0.36	2.0	Stud	315	
2N3879	35	25	7.0	120	75	7	20-80	4.0	1.2	4.0		0.44	1.2	TO66	526	
2N3585	35	25	2.0	500	300	6	25-100	1.0	0.75	1.0	15-75	3.0	7.0	TO66	384	
2N2814	50	100	10.0	120	80	8	50-150	1.0	0.5	5.0	15-70	0.35	1.2	TO61	415	
2N5004	58	25	10.0	100	80	5.5	70-200	2.5	1.5	5.0		0.5	1.4	TO59 3/	534	2N5005
2N5157	100	75	3.5	700	500	6	30-90	1.0	0.8	1.0	2.5-12	0.8	1.7	TO3	371	
2N3442	117	25	10.0	160	140	7	20-70	3.0	1.0	3.0	0.1			TO3	370	
2N6033	140	25	40.0	150	120	7	10-50	40.0	1.0	40.0		0.5	2.0	TO3	528	
2N5672	140	25	30.0	150	120	7	20-100	15.0	0.75	15.0	50-200	0.5	2.0	TO3	488	
2N5038	140	25	20.0	150	90	7	50-200	2.0	1.0	12.0	60-200	0.5	2.0	TO3	439	
2N5039	140	25	20.0	125	75	7	30-150	2.0	1.0	10.0	60-200	0.5	2.0	TO3	439	
2N5241	150	25	10.0	400	400	6	15-35	2.5	0.7	2.5	2.5-7.5	0.8	1.7	TO3	414	
2N3716	150	25	10.0	100	80	7	30-120	3.0	1.0	5.0	4-20	1.5	2.0	TO3	408	2N3792
2N6546	175	25	15.0		300	9	12-60	5.0	1.5	10.0		1.0	4.7	TO3	525	
2N6547	175	25	15.0		400	9	12-60	5.0	1.5	10.0		1.0	4.7	TO3	525	
2N5302	200	25	30.0	60	60	5	15-60	15.0	0.75	10.0	2-20	1.0	3.0	TO3	456	2N4399
2N5303	200	25	20.0	80	80	5	15-60	10.0	1.0	10.0	2-20,	1.0	3.0	TO3	456	2N5745
2N5685	300	25	50.0	60	60	5	15-60	25.0	1.0	25.0	2-20	1.5	3.0	TO3	464	2N5683
2N5686	300	25	50.0	80	80	5	15-60	25.0	1.0	25.0	2-20	1.5	3.0	TO3	464	2N5684
2N5250	350	25	50.0	125	100	10	15-50	40.0	1.0	40.0	20-70	2.0	2.0	TO114	380	
2N5251	350	25	50.0	180	150	10	15-50	40.0	1.35	40.0		2.0	0.5		380	

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ PNP complementary device types are listed in table XX. Some of these may not be exact complements, but are very similarly characterized and are intended for such applications.
3/ Collector is isolated from the case.
4/ Pulsed.

TABLE XX. PNP power transistors ($P_C \geq 5$ W) (listed in order of increasing power).

PNP device type no.	P_T at T_C		Maximum ratings				Primary electrical characteristics							JEDEC outline 1/	Specification MIL-S-19500/	NPN complement 2/
			I_C	$V_{(BR)CBO}$	$V_{(BR)CEO}$	$V_{(BR)EBO}$	h_{FE} at I_C		$V_{CE}(sat)$ at I_C		f	t_{on}	t_{off}			
	(W)	(°C)	(A)	(V dc)	(V dc)	(V dc)		(A)	(max)	(A)	(MHz)	(μs)	(μs)			
2N3741	25.0	25	4	80	80	7	30-100	0.25	0.6	1	4-20	0.4	1.0	TO66	441	
2N6211	35.0	25	2	275	225	6	30-175	1.0	1.4	1	5	0.6	3.0	TO66	461	
2N6212	35.0	25	2	350	300	6	35-175	1.0	1.6	1	5	0.6	1.0	TO66	461	
2N6213	35.0	25	2	400	350	6	30-175	1.0	2.0	1	20-100	0.6	3.1	TO66 3/	461	
2N5005	58.0	25	10	100	80	5.5	70-200	2.5	1.5	5		0.5	1.5	TO59	535	2N5004
2N3792	150.0	25	10	80	80	7	30-120	3.0	1.0	5	4-20	1.5	2.0	TO3	379	2N3716
2N4399	200.0	25	30	60	60	5	15-60	15.0	0.75	15	4-40	0.4	2.1	TO3	433	2N5302
2N5745	200.0	25	20	80	80	5	15-60	10.0	1.0	10	2-40	1.0	3.0	TO3	433	2N5303
2N5437	200.0	25	25	120	100	6	25-100	10.0	1.0	10		0.5	1.25	TO3	508	2N5686
2N5684	300.0	25	50	80	80	5	15-60	25.0	1.0	25				TO3 3/	466	2N5686
2N5683	300.0	25	50	60	60	5	15-60	25.0	1.0	25		1.5	3.0	TO3	466	2N5685

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
2/ NPN complementary device types are listed in table XIX. Some of these may not be exact complements, but are very similarly characterized and are intended for such applications
3/ Collector is isolated from the case.

TABLE XXI. RF transistors.

Device type no.	Polarity	P_T at T_C (W)	T_C (°C)	P_{out} (W)	Pin (W)	f (MHz)	n (%)	Maximum ratings I_C (A)	$V_{(BR)CBO}$	$V_{(BR)CEO}$ / $V_{(BR)CEX}$	$V_{(BR)EBO}$	Primary electrical characteristics h_{FE} at I_C (A)	$V_{CE(sat)}$ (max) at I_C V dc / (A)	f_t (MHz)	NF at f (dB) / (MHz)	JEDEC outline 1/	Specification MIL-S-19500/
2N918	NPN	0.3	25					0.05	30	15	3.0	20-200	0.003 / 0.4	0.01 / 600/	6.0	60	TO72	301
2N2857	NPN	0.3	25					0.04	30	15	3.0	30-150	0.003 / 0.4	0.01 / 1000/1900	4.5	450	TO72	343
2N3375	NPN	11.6	25	7.5-1.4	1.0	100	65	1.5	65	40	4.0	15-150	0.15 / 0.7	0.5 / 350/			TO60	341
				3-6	1.0	400	40											
2N3553	NPN	1.0	*25	2.5-5	0.25	175	50	1.0	65	40	4.0	15-150	0.15 / 0.6	0.25 / 350/			TO39	341
2N3866A	NPN	1.0	*25	1-2	0.15	400	45	0.4	60	30	3.5	25-200	0.05 / 1.0	0.1 / 800/1500			TO39	398
				0.5	0.075	400	40											
2N5109	NPN	1.0	*25	Power gain = 11.0 dB min pin = -10 dBm f = 200 MHz				0.4	40	20	3.0	40-120	0.05 / 0.5	0.1 / 1200/1800	3.0	200	TO39	453
2N4957	PNP	0.2	*25	Power gain = 17 dB min, 25 dB max f = 450 MHz				0.03	30	30	3.0	30-165	0.005	1200/3600	3.0	450	TO72	426
2N6603	NPN	0.4	100	G_{pe} = 14-20 dB I_C = 15 mA dc, f = 1 GHz				0.03	25	15	3.0	30-200	0.015		2.5	1000	TO244 4 leads	*22
2N6604	NPN	0.5	75	G_{pe} = 14-20 dB I_C = 30 mA dc, f = 1 GHz				0.05	25	15	3.0	30-200	0.030		3.0	1000	TO244 4 leads	522

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XXII. Dual transistors (differential amplifier).

Device type no.	Polarity	Maximum ratings at T_A = 25°C: P_T One side only (mW)	P_T Both sides (mW)	I_C (mA dc)	$V_{(BR)CBO}$ (V dc)	$V_{(BR)CEO}$ (V dc)	$V_{(BR)EBO}$ (V dc)	Primary electrical characteristics: h_{FE} at I_C	I_C (mA)	h_{FE1}/h_{FE2}	$V_{BE1} - V_{BE2}$ (mV dc)	$\Delta(V_{BE1} - V_{BE2})/\Delta T_C$ (μV dc/°C)	C_{obo} (Max) (pF)	NF (dB)	f_t (MHz)	JEDEC outline 1/	Specification MIL-S-19500/
2N2060	NPN	540	600	500	100	60	7	40-120	1.0	0.9-1.1	5	0.8	15	8.0	60-500	TO77	270
2N2920	NPN	300	500	30	70	60	6	175-600	0.01	0.9-1.1	3	0.8	5	3.0	60-400	TO77	355
2N3810	PNP	500	600	50	60	60	5	150-450	1.0	0.9-1.0	3	0.8	5	3.5	100-500	TO77	336
2N3811	PNP	500	600	50	60	60	5	300-900	1.0	0.9-1.0	3	0.8	5	2.5	100-500	TO77	336

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XXIII. Dual transistors.

Device type no.	Polarity	P_T at T_A 25°C		Maximum ratings				Primary electrical characteristics						JEDEC outline 1/	Specification MIL-S-19500/
		One side only (W)	Both sides (W)	I_C (mA)	$V_{(BR)CBO}$ (V dc)	$V_{(BR)CEO}$ (V dc)	$V_{(BR)EBO}$ (V dc)	h_{FE} at I_C	(mA)	$V_{CE}(sat)$ at I_C (V dc)	(mA)	f_t (MHz)	C_{obo} (pF)		
2N1854	NPN/PNP	0.30	0.60	600	60	5	40	100-300	150	0.4	150	200/800	8	TO77	421
2N5794	NPN/NPN	0.50	0.60	600	75	40	6	120-300	150			200/1000	8		495
2N5796	PNP/PNP	0.50	0.60	600	60	60	5	100-300	150			200/1000	8		496

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XXIV. Darlington transistors.

Device type no.	Polarity	Maximum ratings							Primary electrical characteristics							JEDEC outline 1/	Specification MIL-S-19500/	Complement
		P_T at T_C		I_C	V_{EB1}	V_{EB2}	V_{CBO1}	V_{CER}	h_{FE} at I_C		$V_{CE(sat)}$ at I_C		f	t_{on}	t_{off}			
		(W)	(°C)	(A dc)	(V dc)	(V dc)	(V dc)	(V dc)		(A dc)	(V dc)	(A dc)	(MHz)	(μs)	(μs)			
2N6350	NPN	5	100	5	12	6	80	80	2,000-10,000	5	1.5	5	50/250	0.5	1.2	TO33	472	
2N6351	NPN	5	100	5	12	6	150	150	1,000-10,000	5	2.5	5	50/250	0.5	1.2	TO33	472	
2N6352	NPN	25	100	5	12	6	80	80	2,000-10,000	5	1.5	5	50/250	0.5	1.2	TO66	472	
2N6353	NPN	25	100	5	12	6	150	150	1,000-10,000	5	2.5	5	50/250	0.5	1.2	TO66	472	
2N6649	PNP	85	25	10	5		60		1,000-20,000	5	2.0	5	50/400	2.5	10.0	TO3	527	2N6384
2N6650	PNP	85	25	10	5		80		1,000-20,000	5	2.0	5	50/400	2.5	10.0	TO3	527	2N6385
2N6384	NPN	100	25	10	5		60		1,000-20,000	5	2.0	5	20/300	2.5	10.0	TO3	523	2N6649
2N6385	NPN	100	25	10	5		80		1,000-20,000	5	2.0	5	20/300	2.5	10.0	TO3	523	2N6550
2N6051	PNP	150	25	12	5		80		1,000-20,000	6	3.0	12	20/125	1.0	6.0	TO3	501	2N6058
2N6052	PNP	150	25	12	5		100		1,000-10,000	6	3.0	12	20/125	1.0	6.0	TO3	501	2N6059
2N6058	NPN	150	25	12	5		80		2,500-18,000	6	3.0	12	20/125	1.0	6.0	TO3	502	2N6051
2N6059	NPN	150	25	12	5		100		2,500-18,000	6	3.0	12	20/125	1.0	6.0	TO3	502	2N6052
2N6283	NPN	175	25	20	7		80		1,250-18,000	10	3.0	20	8/80	1.5	7.5	TO3	504	2N6286
2N6284	NPN	175	25	20	7		100		1,250-18,000	10	3.0	20	8/80	1.5	7.5	TO3	504	2N6287
2N6286	PNP	175	25	20	7		80		1,250-18,000	10	3.0	20	8/80	1.5	5.5	TO3	505	2N6283
2N6287	PNP	175	25	20	7		100		1,250-18,000	10	3.0	20	8/80	1.5	5.5	TO3	505	2N6284
2N6299	PNP	32	100	8			80		750-18,000	4	2.0	4	25/350	2.0	8.0	TO66	540	2N6301
2N6301	NPN	32	100	8			80		750-18,000	4	2.0	4	25/350	2.0	8.0	TO66	539	2N6299

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XXV. Unijunction transistors.

Device type no.	Maximum ratings at T_A = 25°C		Primary electrical characteristics				JEDEC outline 1/	Specification MIL-S-19500/
	P (mW)	I_e (mA) rms	R_{BBO} (ohms)		I_{B2}(mod) (mA)	V_{EB1}(sat)max (V dc)		
2N4948	360	50	4000-12000	0.55-0.82	12-	3.0	TO18	388
2N6116	300						TO18	493

1/ Mechanical configuration of device is equal or similar to referenced JEDEC outline.

TABLE XXVI. Junction field effect transistors.

Device no. type	Channel	Maximum ratings					Primary electrical characteristics											JEDEC outline 2/	Specification MIL-S-19500/
		P_T at T_A = 25°C (mW)	V_{DG} (V)	V_{DS} (V)	V_{GS} (V)	I_G (mA)	$\lvert y_{fs} \rvert$ (μmhos) min/max	I_{GSS} (max) (nA)	$V_{GS(OFF)}$ (volts) 1/ min	$V_{GS(OFF)}$ (volts) 1/ max	NF (max) (dB)	$V_{DS(ON)}$ min/max	$r_{ds(on)}$ Ω	I_{DSS} (mA) min/max	t_d (ns)	t_r (ns)	t_{off} (ns)	C_{iss} (pF)		
2N3821	n	300	50	50	50	10	1500/4500			4								6	TO72	375
2N3822	n	300	50	50	50	10	3800/6500			6								6	TO72	375
2N3823	n	300	30	30	30	10	3500/6500	0.5		8	2.5	1/7.5		4/20				6	TO72	375
2N4856	n	360	40	40	40	50		0.25	4.0	10		/.75	25	50/---	6	3	25	18	TO18	385
2N4857	n	360	40	40	40	50		0.25	2.0	6		/.5	40	20/100	6	4	50	18	TO18	385
2N4858	n	360	40	40	40	50		0.25	0.8	4		/.5	60	8/80	10	10	100	18	TO18	385
2N5114	p	500	30	30	30	50		0.5	5.0	10		1.3	75	30/90		10	6	25	TO18	476
2N5115	p	500	30	30	30	50		0.5	3.0	6		0.8	100	15/60		20	8	25	TO18	476
2N5116	p	500	30	30	30	50		0.5	1.0	4		0.6	175	5/25		35	20	27	TO18	476
2N5545	n 4/	250/400	50	---	50	30	1500/6000		0.5	4.5	3.5			5/8				6	TO71	430
2N5546	n 4/	250/400	50	---	50	30	1500/6000		0.5	4.5	5.0			5/8				6	TO71	430

1/ This parameter is identified as V_p in older specifications.
2/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.
3/ g_{fs}.
4/ Dual matched.

TABLE XXVII. Low-power chopper transistors.

Device type no.	Polarity	Maximum ratings				Primary electrical characteristics																JEDEC outline 1/	Specification MIL-S-19500/
		P_T T_A = 25°C (mW)	I_C (mA dc)	*V_{CBO} V_{CEO} (V dc)	*V_{EBO} V_{CC} (V dc)	h_{FE} at I_C		h_{FE}(inv) at I_C		h_{fe} at I_C		f	$V_{CE(sat)}$	I_C / I_B (mA dc)	$r_{oc(on)}$ (ohms)	$V_{oc(ofs)}$ (mV dc)	*C_{obo} C_{ibo} (pF)	t_d (ns)	t_r (ns)	t_s (ns)	t_f (ns)		
							(mA dc)		(mA dc)		(mA dc)	(MHz)	(V dc)										
2N2432A	NPN	300	100	*45 45	*15 18	80-400	1.	3		2-10	1	20	0.15	*10 0.5	15	0.7	*12 12					TO18	313
2N2945A	PNP	400	100	*25 20	*25 20	70	1.	30	0.2	10-55	1	1			6	1.0	*10 6	50	100	350	100	TO46	382
2N2946A	PNP	400	100	*40 35	*40 35	50	1.	20	0.2	5-55	1	1			8	2.0	*10 6	50	100	350	100	TO46	382

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

TABLE XXVIII. MOS FET, power.

Device type no.	Channel	Maximum ratings					Primary electrical characteristics									JEDEC outline 1/	Specification MIL-S-19500/
		P_T at T_C = 25°C W	V_{DS} V	V_{GS} V	I_D at T_C = 25°C A	I_{DM} A(pk)	$V_{GS(th)}$ min at I_D max mA		$r_{DS(on)}$ at V_{GS} = 10 V max Ω	$t_{d(on)}$ ns	t_r ns	$t_{d(off)}$ ns	t_f ns	C_{iss} pF	g_{fs} min	g_{fs} max		
2N6782	N	15	100	±20	3.50	14.0	2.0 4.0	0.5	.6	15	25	25	20	60/200	1.0	3.0	TO39	556
2N6784	N	15	200	±20	2.25	9.0	2.0 4.0	0.5	1.5	15	20	30	20	60/200	0.9	2.7	TO39	556
2N6786	N	15	400	±20	1.25	5.5	2.0 4.0	0.5	3.6	15	20	35	30	60/200	0.7	2.1	TO39	556
2N6788	N	20	100	±20	6.0	24	2.0 4.0	1.0	.30	40	70	40	70	200/600	1.5	4.5	TO39	555
2N6790	N	20	200	±20	3.5	14	2.0 4.0	1.0	.80	40	50	50	50	200/600	1.5	4.5	TO39	555
2N6792	N	20	400	±20	2.0	10	2.0 4.0	1.0	1.80	40	35	60	35	200/600	1.0	3.0	TO39	555
2N6794	N	20	500	±20	1.5	6.5	2.0 4.0	1.0	3.00	40	30	60	30	200/600	1.0	3.0	TO39	555
2N6796	N	25	100	±20	8.0	25	2.0 4.0	0.5	.18	30	75	40	45	350/900	3.0	4.0	TO39	557
2N6798	N	25	200	±20	5.5	12.5	2.0 4.0	0.5	.4	30	50	50	40	350/900	2.5	7.5	TO39	557
2N6800	N	25	400	±20	3.0	6.0	2.0 4.0	0.5	1.0	30	35	55	35	350/900	2.0	6.0	TO39	557
2N6802	N	25	500	±20	2.5	5.0	2.0 4.0	0.5	1.5	30	30	50	30	350/900	1.5	4.5	TO39	557
2N6756	N	75	100	±20	14.0	56	2.0 4.0	1.0	.18	30	75	40	45	350/800	4.0	12.0	TO3	542
2N6758	N	75	200	±20	9.0	36	2.0 4.0	1.0	.4	30	50	50	40	350/800	3.0	9.0	TO3	542
2N6760	N	75	400	±20	5.5	22	2.0 4.0	1.0	1.0	30	35	55	35	350/800	3.0	9.0	TO3	542
2N6762	N	75	500	±20	4.5	18	2.0 4.0	1.0	1.5	30	30	55	30	350/800	2.5	7.5	TO3	542
2N6764	N	150	100	±20	38.0	160	2.0 4.0	1.0	.055	35	100	125	100	1000/3000	9.0	27.0	TO3	543
2N6766	N	150	200	±20	30.0	120	2.0 4.0	1.0	.085	35	100	125	100	1000/3000	9.0	27.0	TO3	543
2N6768	N	150	400	±20	14.0	60	2.0 4.0	1.0	.300	35	65	150	75	1000/3000	8.0	24.0	TO3	543
2N6770	N	150	500	±20	12.0	52	2.0 4.0	1.0	.400	35	50	150	70	1000/3000	8.0	24.0	TO3	543

1/ Mechanical configurations of devices are equal or similar to referenced JEDEC outlines.

2/ The following new specifications with the included devices are not yet qualified. They should be added to this table by notice.

/562	P channel	2N6804,05
/563	P channel	2N6845,47
/564	P channel	2N6849,51
/565	P channel	2N6895-98
/566	N channel	2N6901-04

TABLE XXIX. Numerical listing of diodes, diode arrays, and bridge rectifiers.

Device type no.	Table	Device type no.	Table
1N746A-1	X	1N2806B	X
1N747A-1	X	1N2807B	X
1N748A-1	X	1N2808B	X
1N749A-1	X	1N2809B	X
1N750A-1	X	1N2810B	X
1N751A-1	X	1N2811B	X
1N752A-1	X	1N2813B	X
1N753A-1	X	1N2814B	X
1N754A-1	X	1N2816B	X
1N755A-1	X	1N2818B	X
1N756A-1	X	1N2819B	X
1N757A-1	X	1N2820B	X
1N758A-1	X	1N2822B	X
1N759A-1	X	1N2823B	X
1N821-1	IX	1N2824B	X
1N823-1	IX	1N2825B	X
1N825-1	IX	1N2826B	X
1N827-1	IX	1N2827B	X
1N829-1	IX	1N2829B	X
1N935B-1	IX	1N2831B	X
1N937B-1	IX	1N2832B	X
1N938B-1	IX	1N2833B	X
1N939B	IX	1N2834B	X
1N940B	IX	1N2835B	X
1N941B	IX	1N2836B	X
1N943B	IX	1N2837B	X
1N944B	IX	1N2838B	X
1N945B	IX	1N2840B	X
1N962B-1	X	1N2841B	X
1N963B-1	X	1N2842B	X
1N964B-1	X	1N2843B	X
1N965B-1	X	1N2844B	X
1N966B-1	X	1N2845B	X
1N967B-1	X	1N2846B	X
1N968B-1	X	1N2970B	X
1N969B-1	X	1N2971B	X
1N970B-1	X	1N2972B	X
1N971B-1	X	1N2973B	X
1N972B-1	X	1N2974B	X
1N973B-1	X	1N2975B	X
1N974B-1	X	1N2976B	X
1N975B-1	X	1N2977B	X
1N976B-1	X	1N2979B	X
1N977B-1	X	1N2980B	X
1N978B-1	X	1N2982B	X
1N979B-1	X	1N2984B	X
1N980B-1	X	1N2985B	X
1N981B-1	X	1N2986B	X
1N982B-1	X	1N2988B	X
1N983B-1	X	1N2989B	X
1N984B-1	X	1N2990B	X
1N1186	IV	1N2991B	X
1N1188	IV	1N2992B	X
1N1190	IV	1N2993B	X
1N1202A	IV	1N2995B	X
1N1204A	IV	1N2997B	X
1N1206A	IV	1N2999B	X
1N2804B	X	1N3000B	X
1N2805B	X	1N3001B	X

TABLE XXIX. Numerical listing of diodes, diode arrays, and bridge rectifiers - Continued.

Device type no.	Table	Device type no.	Table
1N3002B	X	1N4477	X
1N3003B	X	1N4478	X
1N3004B	X	1N4479	X
1N3005B	X	1N4480	X
1N3007B	X	1N4481	X
1N3008B	X	1N4482	X
1N3009B	X	1N4483	X
1N3011B	X	1N4484	X
1N3012B	X	1N4485	X
1N3014B	X	1N4486	X
1N3015B	X	1N4487	X
1N3154	IX	1N4488	X
1N3155	IX	1N4489	X
1N3156	IX	1N4490	X
1N3157	IX	1N4491	X
1N3644	VI	1N4492	X
1N3645	VI	1N4493	X
1N3646	VI	1N4494	X
1N3647	VI	1N4495	X
1N3671A	IV	1N4496	X
1N3673A	IV	1N4557B	X
1N3766	IV	1N4558B	X
1N3768	IV	1N4559B	X
1N3891	III	1N4560B	X
1N3893	III	1N4561B	X
1N3911	III	1N4562B	X
1N3913	III	1N4565A	IX
1N3993A	X	1N4566A	IX
1N3994A	X	1N4567A	IX
1N3995A	X	1N4568A	IX
1N3996A	X	1N4569A	IX
1N3997A	X	1N4570A	IX
1N3998A	X	1N4571A	IX
1N3999A	X	1N4572A	IX
1N4000A	X	1N4573A	IX
1N4148-1	I	1N4574A	IX
1N4150-1	I	1N4938-1	I
1N4153-1	I	1N4954	X
1N4370A-1	X	1N4955	X
1N4371A-1	X	1N4956	X
1N4372A-1	X	1N4957	X
1N4454-1	I	1N4958	X
1N4460	X	1N4959	X
1N4461	X	1N4960	X
1N4462	X	1N4961	X
1N4463	X	1N4962	X
1N4464	X	1N4963	X
1N4465	X	1N4964	X
1N4466	X	1N4965	X
1N4467	X	1N4966	X
1N4468	X	1N4967	X
1N4469	X	1N4968	X
1N4470	X	1N4969	X
1N4471	X	1N4970	X
1N4472	X	1N4971	X
1N4473	X	1N4972	X
1N4474	X	1N4973	X
1N4475	X	1N4974	X
1N4476	X	1N4975	X

TABLE XXIX. Numerical listing of diodes, diode arrays, and bridge rectifiers - Continued.

Device type no.	Table	Device type no.	Table
1N4976	X	1N5311	XII
1N4977	X	1N5312	XII
1N4978	X	1N5313	XII
1N4979	X	1N5314	XII
1N4980	X	1N5415	III
1N4981	X	1N5416	III
1N4982	X	1N5417	III
1N4983	X	1N5418	III
1N4984	X	1N5419	III
1N4985	X	1N5420	III
1N4986	X	1N5461B	XI
1N4987	X	1N5462B	XI
1N4988	X	1N5463B	XI
1N4989	X	1N5464B	XI
1N4990	X	1N5465B	XI
1N4991	X	1N5466B	XI
1N4992	X	1N5467B	XI
1N4993	X	1N5468B	XI
1N4994	X	1N5469B	XI
1N4995	X	1N5470B	XI
1N4996	X	1N5471B	XI
1N5139A	XI	1N5472B	XI
1N5140A	XI	1N5473B	XI
1N5141A	XI	1N5474B	XI
1N5142A	XI	1N5475B	XI
1N5143A	XI	1N5476B	XI
1N5144A	XI	1N5551	II
1N5145A	XI	1N5552	II
1N5146A	XI	1N5553	II
1N5147A	XI	1N5554	II
1N5148A	XI	1N5615	III
1N5283	XII	1N5616	II
1N5284	XII	1N5617	III
1N5285	XII	1N5618	II
1N5286	XII	1N5619	III
1N5287	XII	1N5620	II
1N5288	XII	1N5621	III
1N5289	XII	1N5622	II
1N5290	XII	1N5623	III
1N5291	XII	1N5711	I
1N5292	XII	1N5712	I
1N5293	XII	1N5719	I
1N5294	XII	1N5804	III
1N5295	XII	1N5806	III
1N5296	XII	1N5809	III
1N5297	XII	1N5811	III
1N5298	XII	1N5814	III
1N5299	XII	1N5816	III
1N5300	XII	1N6092	XIV
1N5301	XII	1N6093	XIV
1N5302	XII	1N6094	XIV
1N5303	XII	1N6101	VIII
1N5304	XII	1N6103A	XIII
1N5305	XII	1N6104A	XIII
1N5306	XII	1N6105A	XIII
1N5307	XII	1N6106A	XIII
1N5308	XII	1N6107A	XIII
1N5309	XII	1N6108A	XIII
1N5310	XII	1N6109A	XIII

TABLE XXIX. Numerical listing of diodes, diode arrays, and bridge rectifiers - Continued.

Device type no.	Table	Device type no.	Table
1N6110A	XIII	1N6168A	XII
1N6111A	XIII	1N6169A	XIII
1N6112A	XIII	1N6170A	XIII
1N6113A	XIII	1N6171A	XIII
1N6114A	XIII	1N6172A	XIII
1N6115A	XIII	1N6173A	XIII
1N6116A	XIII	1N6391	V
1N6117A	XIII	1N6392	V
1N6118A	XIII	1N6304	III
1N6119A	XIII	1N6305	III
1N6120A	XIII	1N6306	III
1N6121A	XIII	1N6461	XII
1N6122A	XIII	1N6462	XII
1N6123A	XIII	1N6463	XII
1N6124A	XIII	1N6464	XII
1N6125A	XIII	1N6465	XII
1N6126A	XIII	1N6466	XII
1N6127A	XIII	1N6467	XII
1N6128A	XIII	1N6468	XII
1N6129A	XIII	M19500/469-01	VII
1N6130A	XIII	M19500/469-02	VII
1N6131A	XIII	M19500/469-03	VII
1N6132A	XIII	M19500/483-01	VII
1N6133A	XIII	M19500/483-02	VII
1N6134A	XIII	M19500/483-03	VII
1N6135A	XIII	M19500/519-02	XIV
1N6136A	XIII	M19500/520-02	XIV
1N6137A	XIII	M19500/521-02	XIV
1N6139A	XIII	SPA25	VII
1N6140A	XIII	SPB25	VII
1N6141A	XIII	SPC25	VII
1N6142A	XIII	SPD25	VII
1N6143A	XIII		
1N6144A	XIII		
1N6145A	XIII		
1N6146A	XIII		
1N6147A	XIII		
1N6148A	XIII		
1N6149A	XIII		
1N6150A	XIII		
1N6151A	XIII		
1N6152A	XIII		
1N6153A	XIII		
1N6154A	XIII		
1N6155A	XIII		
1N6156A	XIII		
1N6157A	XIII		
1N6158A	XIII		
1N6159A	XIII		
1N6160A	XIII		
1N6161A	XIII		
1N6162A	XIII		
1N6163A	XIII		
1N6164A	XIII		
1N6165A	XIII		
1N6166A	XIII		
1N6167A	XIII		

TABLE XXX. Numerical listing of thyristors.

Device type no.	Table	Device type no.	Table
2N685	XV	2N2323A	XV
2N688	XV	2N2324A	XV
2N690	XV	2N2326A	XV
2N692	XV	2N2328A	XV
2N1774A	XV	2N2329	XV
2N1777A	XV	2N3027	XV
2N1795	XV	2N3028	XV
2N1798	XV	2N3029	XV
2N1800	XV	2N3093	XV
2N1806	XV	2N3095	XV
2N1913	XV	2N3097	XV
2N1916	XV		

TABLE XXXI. Numerical listing of transistors.

Device type no.	Table	Device type no.	Table
2N918	XVII, XXI	2N4857	XXVI
2N2060	XXII	2N4858	XXVI
2N2151	XIX	2N4948	XXV
2N2219A	XVII	2N4957	XXI, XVIII
2N2222A	XVII	2N5005	XX
2N2369A	XVII	2N5038	XIX
2N2432A	XXVII	2N5039	XIX
2N2484	XVII	2N5109	XXI
2N2605	XVIII	2N5114	XXVI
2N2814	XIX	2N5115	XXVI
2N2857	XXI	2N5116	XXVI
2N2880	XIX	2N5153	XVIII
2N2905A	XVIII	2N5154	XVII
2N2907A	XVIII	2N5157	XIX
2N2920	XXII	2N5237	XVII
2N2945A	XXVII	2N5241	XIX
2N2946A	XXVII	2N5250	XIX
2N3013	XVII	2N5251	XIX
2N3019	XVII	2N5302	XIX
2N3251A	XVIII	2N5303	XIX
2N3375	XXI	2N5416	XVIII
2N3421	XVII	2N5545	XXVI
2N3439	XVII	2N5546	XXVI
2N3440	XVII	2N5582	XVII
2N3442	XIX	2N5664	XIX
2N3467	XVIII	2N5665	XIX
2N3486A	XVIII	2N5666	XVII
2N3501	XVII	2N5667	XVII
2N3507	XVII	2N5672	XIX
2N3553	XXI	2N5683	XX
2N3585	XIX	2N5684	XX
2N3637	XVIII	2N5685	XIX
2N3700	XVII	2N5686	XIX
2N3716	XIX	2N5745	XX
2N3735	XVII	2N5794	XXIII
2N3737	XVII	2N5796	XXIII
2N3739	XIX	2N6033	XIX
2N3741	XX	2N6051	XXIV
2N3743	XVIII	2N6052	XXIV
2N3762	XVIII	2N6058	XXIV
2N3764	XVIII	2N6059	XXIV
2N3767	XIX	2N6116	XXV
2N3792	XX	2N6283	XXIV
2N3810	XXII	2N6284	XXIV
2N3811	XXII	2N6286	XXIV
2N3821	XXVI	2N6287	XXIV
2N3822	XXVI	2N6299	XXIV
2N3823	XXVI	2N6301	XXIV
2N3866A	XXI	2N6350	XXIV
2N3868	XVIII	2N6351	XXIV
2N3879	XIX	2N6352	XXIV
2N3960	XVII	2N6353	XXIV
2N3997	XIX	2N6384	XXIV
2N4033	XVIII	2N6385	XXIV
2N4150	XVII	2N6437	XX
2N4261	XVIII	2N6546	XIX
2N4399	XX	2N6547	XIX
2N4449	XVII	2N6603	XXI
2N4854	XXIII	2N6604	XXI
2N4856	XXVI		

TABLE XXXI. Numerical listing of transistors - Continued.

Device type no.	Table	Device type no.	Table
2N6649	XXIV		
2N6650	XXIV		
2N6756	XXVIII		
2N6758	XXVIII		
2N6760	XXVIII		
2N6762	XXVIII		
2N6764	XXVIII		
2N6766	XXVIII		
2N6768	XXVIII		
2N6770	XXVIII		
2N6782	XXVIII		
2N6784	XXVIII		
2N6786	XXVIII		
2N6788	XXVIII		
2N6790	XXVIII		
2N6792	XXVIII		
2N6794	XXVIII		
2N6796	XXVIII		
2N6798	XXVIII		
2N6800	XXVIII		
2N6802	XXVIII		
4N47	XVI		
4N48	XVI		
4N49	XVI		

Custodians:
Army - ER
Navy - EC
Air Force - 17

Review activities:
Army - MI, SM, AT
Navy - SH
Air Force -11, 85, 99
DLA - ES
NASA - NA

User activities:
Army - None
Navy - AS, CG, OS, MC
Air Force - 19

International Interest (see 6.1).

Preparing activity:
Navy - EC

Agent:
DLA - ES

(Project 5961 - 1006)