The documentation and process conversion measures necessary to comply with this revision shall be completed by 10 June 2003.

INCH-POUND

MIL-PRF-19500/525C
10 March 2003
SUPERSEDING
MIL-PRF-19500/525B
10 August 1999

PERFORMANCE SPECIFICATION

* SEMICONDUCTOR DEVICE, TRANSISTOR, NPN, SILICON, POWER
TYPES 2N6546, 2N6546T1, 2N6546T3, 2N6547, 2N6547T1, AND 2N6547T3 JAN, JANTX, AND JANTXV

This specification is approved for use by all Departments and Agencies of the Department of Defense.

1. SCOPE

1.1 Scope. This specification covers the performance requirements for NPN, silicon, power transistors. Three levels of product assurance are provided for each device type as specified in MIL-PRF-19500.

* 1.2 Physical dimensions. See figure 1 (T0-3), figure 2 (T0-254AA), and figure 3 (T0-257AA).

* 1.3 Maximum ratings.

Limits	P_T (1)		V_{CEX}	V_{CEO}	V_{EBO}	I_B	I_C	T_{OP} and T_{stg}	$R_{\theta JC}$ (2)
	T_C = +25°C	T_C = +100°C							
	W	W	V dc	V dc	V dc	A dc	A dc	°C	°C/W
2N6546	175	100	600	300	8	10	15	-65 to +200	1.0
2N6546T1	175	100	600	300	8	10	15	-65 to +200	1.0
2N6546T3	125	100	600	300	8	10	15	-65 to +200	1.4
2N6547	175	100	850	400	8	10	15	-65 to +200	1.0
2N6547T1	175	100	850	400	8	10	15	-65 to +200	1.0
2N6547T3	125	100	850	400	8	10	15	-65 to +200	1.4

(1) See figure 4 for derating curves.
(2) See figures 5, 6, and 7 for thermal impedance graphs.

* 1.4 Primary electrical characteristics.

Limits	h_{FE2} (1)	h_{FE3} (1)	C_{obo}	$\lvert h_{fe} \rvert$	Switching times (2)	
	V_{CE} = 2 V dc I_C = 5 A dc	V_{CE} = 2 V dc I_C = 10 A dc	V_{CB} = 10 V dc I_E = 0 0.1 MHz ≤ f ≤ 1 MHz	V_{CE} = 10 V dc I_C = 1 A dc f = 1 MHz	V_{CC} = 250 V dc I_C = 10 A dc	
					t_{on}	t_{off}
			pF			
Min	12	6		6		
Max	60		500	30	1.0	4.7

(1) Pulsed (see 4.5.1).
(2) See figure 8 for pulse response circuits.

Beneficial comments (recommendations, additions, deletions) and any pertinent data which may be of use in improving this document should be addressed to: Defense Supply Center Columbus, ATTN: DSCC-VAC, P. O. Box 3990, Columbus, OH 43216-5000, by using the Standardization Document Improvement Proposal (DD Form 1426) appearing at the end of this document or by letter.

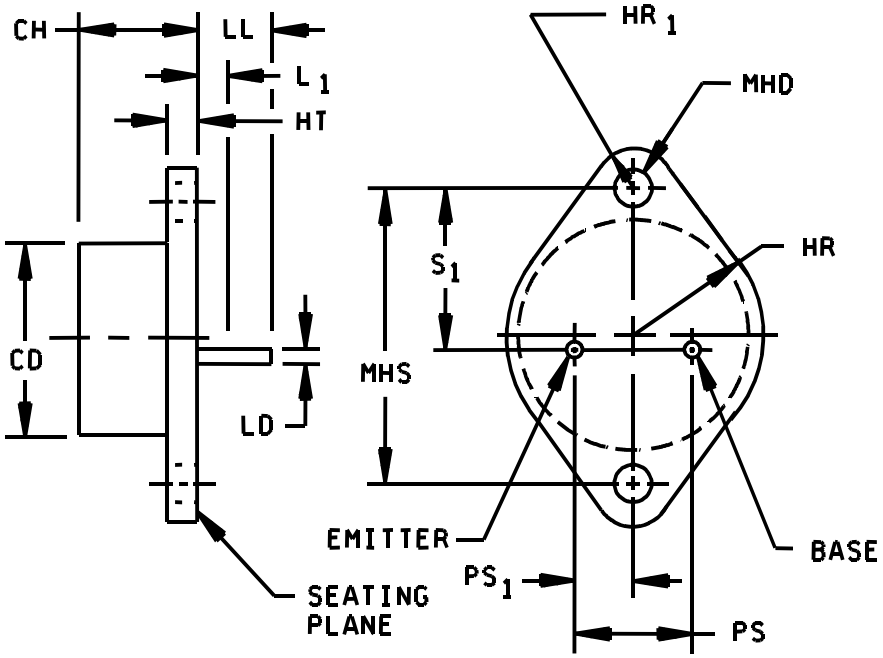
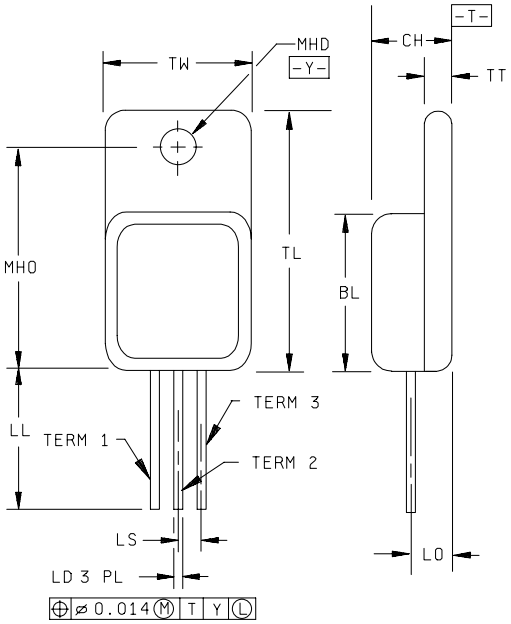


FIGURE 1. Dimensions and configuration (T0-3).

Symbol	Dimensions				Notes
	Inches		Millimeters		
	Min	Max	Min	Max	
CD		.875		22.23	
CH	.250	.450	6.35	11.43	
HR	.495	.525	12.57	13.34	
HR_1	.131	.188	3.33	4.78	
HT	.050	.135	1.27	3.43	
LD	.038	.043	0.97	1.09	
LL	.312		7.92		
L_1		.050		1.27	
MHD	.151	.161	3.84	4.09	
MHS	1.177	1.197	29.90	30.40	
PS	.420	.440	10.67	11.18	3
PS_1	.205	.225	5.21	5.72	3
S1	.655	.675	16.64	17.15	

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. These dimensions should be measured at points .050 inch (1.27 mm) and .055 inch (1.40 mm) below seating plane. When gauge is not used measurement will be made at the seating plane.
4. The seating plane of the header shall be flat within .001 inch (0.03 mm) concave to .004 inch (0.10 mm) convex inside a .930 inch (23.62 mm) diameter circle on the center of the header and flat within .001 inch (0.03 mm) concave to .006 inch (0.15 mm) convex overall.
5. Mounting holes shall be deburred on the seating plane side.
6. Collector is electrically connected to the case.
7. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

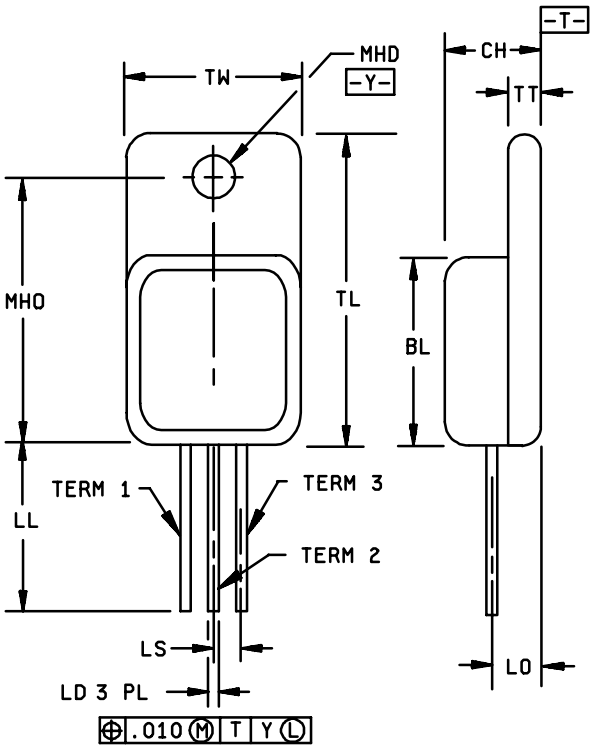
* FIGURE 1. Dimensions and configuration (T0-3) - Continued.



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.535	.545	13.59	13.89
CH	.249	.260	6.32	6.60
LD	.035	.045	0.89	1.43
LL	.530	.550	13.46	13.97
LO	.150 BSC		3.81 BSC	
LS	.150 BSC		3.81 BSC	
MHD	.139	.149	3.53	3.78
MHO	.665	.685	16.89	17.40
TL	.790	.800	20.07	20.32
TT	.040	.050	1.02	1.27
TW	.535	.545	13.59	13.89
Term 1	Base			
Term 2	Collector			
Term 3	Emitter			

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. All terminals are isolated from case.
4. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

* FIGURE 2. Dimensions and configuration for 2N6546T1 and 2N6547T1 (T0-254AA).



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BL	.410	.430	10.41	10.92
CH	.190	.200	4.83	5.08
LD	.025	.035	0.64	0.89
LL	.500	.750	12.70	19.05
LO	.120 BSC		3.05 BSC	
LS	.100 BSC		2.54 BSC	
MHD	.140	.150	3.56	3.81
MHO	.527	.537	13.39	13.63
TL	.645	.665	16.38	16.89
TT	.035	.045	0.89	1.14
TW	.410	.420	10.41	10.67
Term 1	Base			
Term 2	Collector			
Term 3	Emitter			

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Methods used for electrical isolation of the terminals feedthroughs shall employ materials that contain a minimum of 90 percent AL2O3 (ceramic).
4. In accordance with ASME Y14.5M, diameters are equivalent to ϕx symbology.

* FIGURE 3. Dimensions and configuration for 2N6546T3 and 2N6547T3 (T0-257AA).

2. APPLICABLE DOCUMENTS

2.1 General. The documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include documents cited in other sections of this specification or recommended for additional information or as examples. While every effort has been made to ensure the completeness of this list, document users are cautioned that they must meet all specified requirements documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these documents are those listed in the issue of the Department of Defense Index of Specifications and Standards (DODISS) and supplement thereto, cited in the solicitation (see 6.2).

SPECIFICATION

DEPARTMENT OF DEFENSE

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

STANDARD

MILITARY

MIL-STD-750 - Test Methods for Semiconductor Devices.

* (Unless otherwise indicated, copies of the above specifications, standards, and handbooks are available from the Document Automation and Production Services (DAPS), Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

3. REQUIREMENTS

* 3.1 General. The individual item requirements shall be as specified in MIL-PRF-19500 and as modified herein.

* 3.2 Qualification. Devices furnished under this specification shall be products that are manufactured by a manufacturer authorized by the qualifying activity for listing on the applicable qualified manufacturer's list (QML) before contract award (see 4.2 and 6.3).

3.3 Abbreviations, symbols, and definitions. Abbreviations, symbols, and definitions used herein shall be as specified in MIL-PRF-19500.

* 3.4 Interface and physical dimensions. Interface and physical dimensions shall be as specified in MIL-PRF-19500, and on figure 1 (T0-3), figure 2 (T0-254), and figure 3 (T0-257).

3.4.1 Lead finish. Lead finish shall be solderable in accordance with MIL-STD-750, MIL-PRF-19500, and herein. Where a choice of lead finish or formation is desired, it shall be specified in the acquisition requirements (see 6.2).

3.5 Marking. Marking shall be in accordance with MIL-PRF-19500.

3.6 Electrical performance characteristics. Unless otherwise specified, the electrical performance characteristics are as specified in 1.3, 1.4, and table I herein.

3.7 Electrical test requirements. The electrical requirements shall be the subgroups specified in table I herein.

* 3.8 Workmanship. Semiconductor devices shall be processed in such a manner as to be uniform in quality and shall be free from other defects that will affect life, serviceability, or appearance.

4. VERIFICATION

4.1 Classification of inspections. The inspection requirements specified herein are classified as follows:

a. Qualification inspection (see 4.2).

b. Screening (see 4.3).

* c. Conformance inspection (see 4.4 and tables I and II).

4.2 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-19500.

* 4.2.1 Group E qualification. Group E inspection shall be performed for qualification or re-qualification only. In case qualification was awarded to a prior revision of the associated specification that did not request the performance of table II tests, the tests specified in table II herein shall be performed by the first inspection lot of this revision to maintain qualification.

* 4.3 Screening (JANTX and JANTXV levels only). Screening shall be in accordance with table IV of MIL-PRF-19500, and as specified herein. The following measurements shall be made in accordance with table I herein. Devices that exceed the limits of table I herein shall not be acceptable.

Screen (see table IV of MIL-PRF-19500)	Measurements
	JANTX, JANTXV levels
3a 3b 3c	Not applicable Not applicable Thermal impedance (transient), method 3131 of MIL-STD-750 (1)
10	T_A = +150°C; t = 48 hours min. V_{CB} = 200 V dc for 2N6546, 2N6546T1, 2N6546T3 V_{CB} = 300 V dc for 2N6547, 2N6547T1, 2N6547T3
11	h_{FE2} ; I_{CEX1}
12	See 4.3.1
13	Subgroup 2 of table I herein. ΔI_{CEX} = 100 percent of initial value of 100 μA dc, whichever is greater; Δh_{FE2} = ±25 percent of initial value.

(1) Thermal impedance limits shall not exceed figures 5, 6, and 7.

* 4.3.1 Power burn-in conditions. Power burn-in conditions are as follows: T_J = + 175 °C minimum, $V_{CB} \geq$ 20 V dc, T_A = +35°C maximum.

4.4 Conformance inspection. Conformance inspection shall be in accordance with MIL-PRF-19500.

4.4.1 Group A inspection. Group A inspection shall be conducted in accordance with MIL-PRF-19500 and table I herein.

* 4.4.2 Group B inspection. Group B inspection shall be conducted in accordance with the conditions specified for subgroup testing in appendix E, table VIb of MIL-PRF-19500 and herein. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2, herein.

* 4.4.2.1 Group B inspection, table VIb (JAN, JANTX and JANTXV) of MIL-PRF-19500

Subgroup	Method	Conditions
B3	1037	For solder die attach: $V_{CE} \geq 20$ V dc, for 2,000 cycles, $T_A \leq +35°C$.
B3	1027	For eutectic die attach: $V_{CE} \geq 20$ V dc; adjust P_T to achieve T_J = +175°C minimum, $T_A \leq +35°C$.
B5	3131	V_{CE} = 10 V dc, I_C = 4 A, t_H = 1 s, I_M = 20 mA dc; $R_{\theta JC}$ = 1.0°C/W for 2N6546, 2N6546T1, 2N6547 and 2N6547T1; $R_{\theta JC}$ = 1.4°C/W for 2N6546T3 and 2N6547T3.

* 4.4.3 Group C inspection. Group C inspection shall be conducted in accordance with the conditions specified for subgroup testing in table VII of MIL-PRF-19500. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2, herein.

Subgroup	Method	Conditions
C2	2036	Test condition A; for 2N6546 and 2N6547, weight = 10 pounds; t = 15 seconds; for 2N6546T1 and 2N6547T1, weight = 4.5 kg, t = 10 seconds.
C6	1037	For solder die attach: $V_{CE} \geq 20$ V dc, for 6,000 cycles, $T_A \leq +35°C$.
C6	1026	For eutectic die attach: $V_{CE} \geq 20$ V dc; adjust P_T to achieve T_J = +175°C minimum, $T_A \leq +35°C$.

* 4.4.4 Group E inspection. Group E inspection shall be conducted in accordance with the conditions specified for subgroup testing in appendix E, table IX of MIL-PRF-19500 and as specified in table II herein. Electrical measurements (end-points) shall be in accordance with table I, subgroup 2 herein.

4.5 Method of inspection. Methods of inspection shall be as specified in the appropriate tables and as follows.

4.5.1 Pulse measurements. Conditions for pulse measurement shall be as specified in section 4 of MIL-STD-750.

* TABLE I. Group A inspection.

Inspection 1/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
Subgroup 1						
Visual and mechanical examination	2071					
Subgroup 2						
Collector to emitter breakdown voltage	3011	Bias condition D; I_C = 100 mA dc; pulsed (see 4.5.1)	$V_{(BR)CEO}$			
2N6546, 2N6546T1, 2N6546T3				300		V dc
2N6547, 2N6547T1, 2N6547T3				400		V dc
Emitter to base cutoff current	3061	Bias condition D; V_{EB} = 8 V dc	I_{EBO}		1.0	mA dc
Collector to emitter cutoff current	3041	Bias condition A; V_{BE} = 1.5 V dc;	I_{CEX1}		1.0	mA dc
2N6546, 2N6546T1, 2N6546T3		V_{CE} = 600 V dc				
2N6547, 2N6547T1, 2N6547T3		V_{CE} = 850 V dc				
Base emitter voltage (saturated)	3066	Test condition A; I_C = 10 A dc; I_B = 2.0 A dc; pulsed (see 4.5.1)	$V_{BE(sat)}$		1.6	V dc
Collector to emitter saturated voltage	3071	I_C = 10 A dc; I_B = 2.0 A dc; pulsed (see 4.5.1)	$V_{CE(sat)1}$		1.5	V dc
Collector to emitter saturated voltage	3071	I_C = 15 A dc; I_B = 3.0 A dc; pulsed (see 4.5.1)	$V_{CE(sat)2}$		5.0	V dc
Forward-current transfer ratio	3076	V_{CE} = 2 V dc; I_C = 1 A dc; pulsed (see 4.5.1)	h_{FE1}	15		
Forward-current transfer ratio	3076	V_{CE} = 2 V dc; I_C = 5 A dc; pulsed (see 4.5.1)	h_{FE2}	12	60	
Forward-current transfer ratio	3076	V_{CE} = 2 V dc; I_C = 10 A dc; pulsed (see 4.5.1)	h_{FE3}	6		
Subgroup 3						
High temperature operation:		T_A = +150°C				
Collector to emitter cutoff current	3041	Bias condition A; V_{BE} = 1.5 V dc	I_{CEX2}		30	mA dc
2N6546, 2N6546T1, 2N6546T3		V_{CE} = 600 V dc				
2N6547, 2N6547T1, 2N6547T3		V_{CE} = 850 V dc				
Collector to emitter cutoff current	3041	Bias condition A; V_{BE} = 1.5 V dc;	I_{CEX3}		450	µA dc
2N6546, 2N6546T1, 2N6546T3		V_{CE} = 300 V dc				
2N6547, 2N6547T1, 2N6547T3		V_{CE} = 400 V dc				

See footnotes at end of table.

* TABLE I. Group A inspection - Continued.

Inspection 1/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
Subgroup 3 - Continued						
Low temperature operation:		T_A = -55°C				
Forward-current transfer current	3076	V_{CE} = 2.0 V dc; I_C = 5 A dc; pulsed (see 4.5.1)	h_{FE4}	4		
Subgroup 4						
Pulse response	3251	Test condition A except test circuit and pulse requirements in accordance with figure 8 herein.				
Turn-on time		V_{CC} = 250 V dc; I_C = 10 A dc; I_{B1} = I_{B2} = 2 A dc	t_{on}		1.0	µs
Turn-off time		V_{CC} = 250 V dc; I_C = 10 A dc; I_{B1} = I_{B2} = 2 A dc	t_{off}		4.7	µs
Magnitude of common emitter small-signal short-circuit forward-current transfer ratio	3306	V_{CE} = 10 V dc; I_C = .5 A dc; f = 1 MHz	$\lvert h_{fe} \rvert$	6.0	30	
Output capacitance (open circuit)	3236	V_{CB} = 10 V dc; I_E = 0; 0.1 MHz ≤ f ≤ 1.0 MHz	C_{obo}		500	pF
Subgroup 5						
Safe operating area (dc operation)	3051	T_C = +25°C; t = 1 s; 1 cycle; (see figure 9)				
Test 1 (All device types)		I_C = 15 A dc, V_{CE} = 11.7 V dc				
Test 2 (All device types)		I_C = 8.75 A dc, V_{CE} = 20 V dc				
Test 3 2N6546, 2N6546T1, 2N6546T3		V_{CE} = 250 V dc; I_C = 45 mA dc				
2N6547, 2N6547T1, 2N6547T3		V_{CE} = 350 V dc; I_C = 30 mA dc				

See footnotes at end of table.

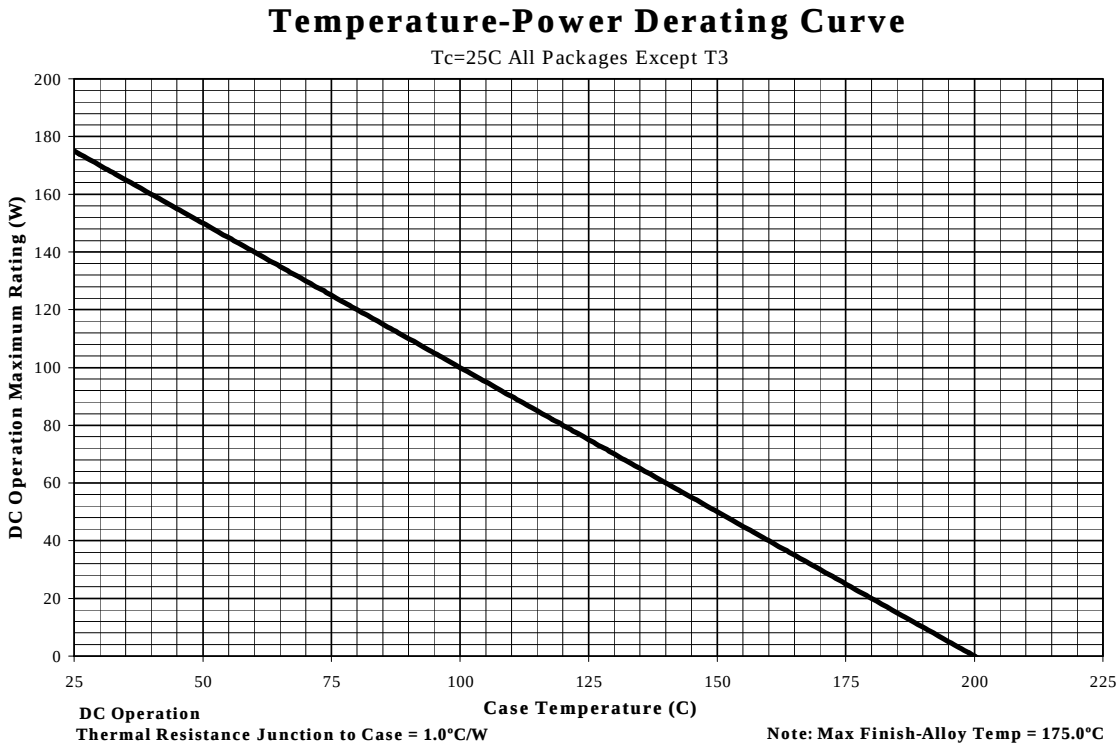
* TABLE I. Group A inspection - Continued.

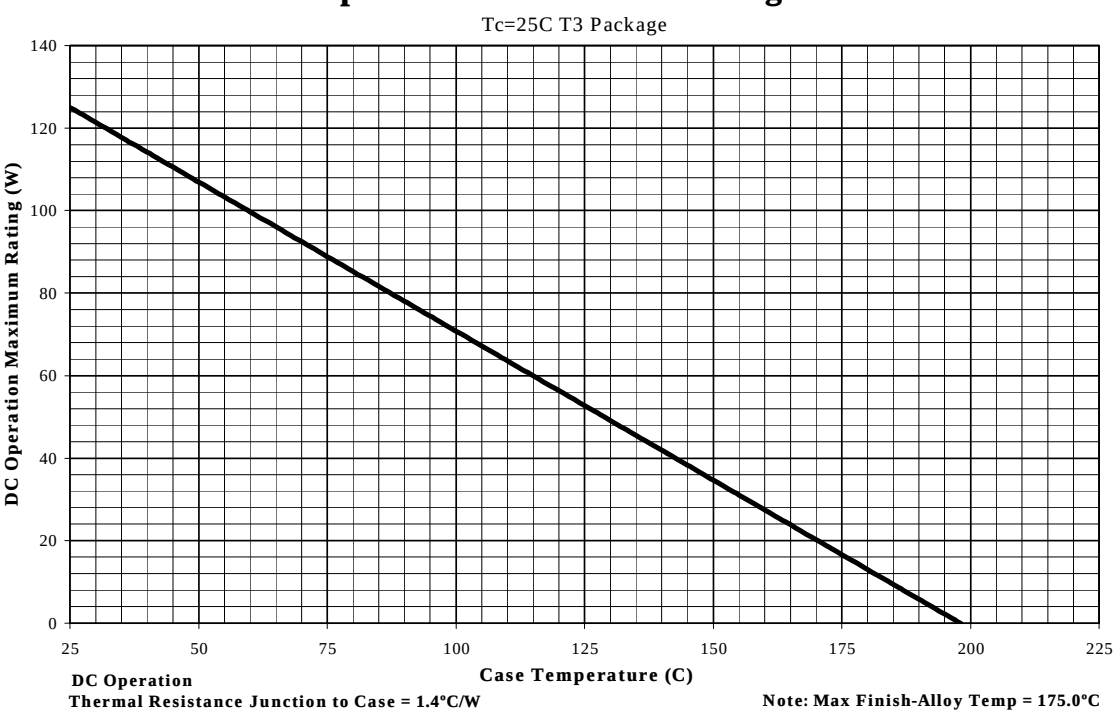
Inspection 1/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
Subgroup 5 - Continued						
Safe operating area	3053	Load condition C; (unclamped inductive load); See figure 10; T_C = 25°C; duty cycle ≤ 10 percent R_S = 0.1 Ω; $t_r = t_f \leq 500$ ns				
Test 1		t_p = 5 ms; (vary to obtain I_C); R_{BB1} = 15 Ω; V_{BB1} = 38.5 V dc; R_{BB2} = 50 Ω; V_{BB2} = -4 V dc; V_{CC} = 20 V dc; I_C = 15 A dc; L = 10 µH 2/				
Test 2		t_p = 5 ms; (vary to obtain I_C); R_{BB1} = 15 Ω; V_{BB1} = 38.5 V dc; R_{BB2} = 50 Ω; V_{BB2} = -4 V dc; V_{CC} = 20 V dc; I_C = 100 mA dc; L = 1 mH 3/				
Electrical measurements:						
Collector to emitter cutoff current	3041	Bias condition A, V_{BE} = 1.5 V dc	I_{CEX3}			
2N6546, 2N6546T1, 2N6546T3		V_{CE} = 600 V dc			2.0	mA dc
2N6547, 2N6547T1, 2N6547T3		V_{CE} = 850 V dc			2.0	mA dc
Safe operating area (switching)		Clamped inductive load; T_A = 25°C; duty cycle ≤ 5 percent; t_p = 1.5 ms; (vary to obtain I_C); V_{CC} = 20 V dc; I_C = 8 A dc; L = 180 µH (see figure 11)				
2N6546, 2N6546T1, 2N6546T3		Clamp voltage = 350 V dc				
2N6547, 2N6547T1, 2N6547T3		Clamp voltage = 450 V dc				
Electrical measurements		Same as safe operating area (unclamped inductive) above				
Subgroups 6 and 7						
Not applicable						

1/ For sampling plan, see MIL-PRF-19500.
2/ L = 10 µH (approx. 10 turns, 1 row of #16ASG wire on an air core 2 7/8 inches ID) .0007 ohms, or equivalent.
3/ L = 1 mH (One each Miller type 7827 in parallel with two each series strung Miller type 7825 and this in series with two each series strung Miller type 7827) .45 ohms, or equivalent.

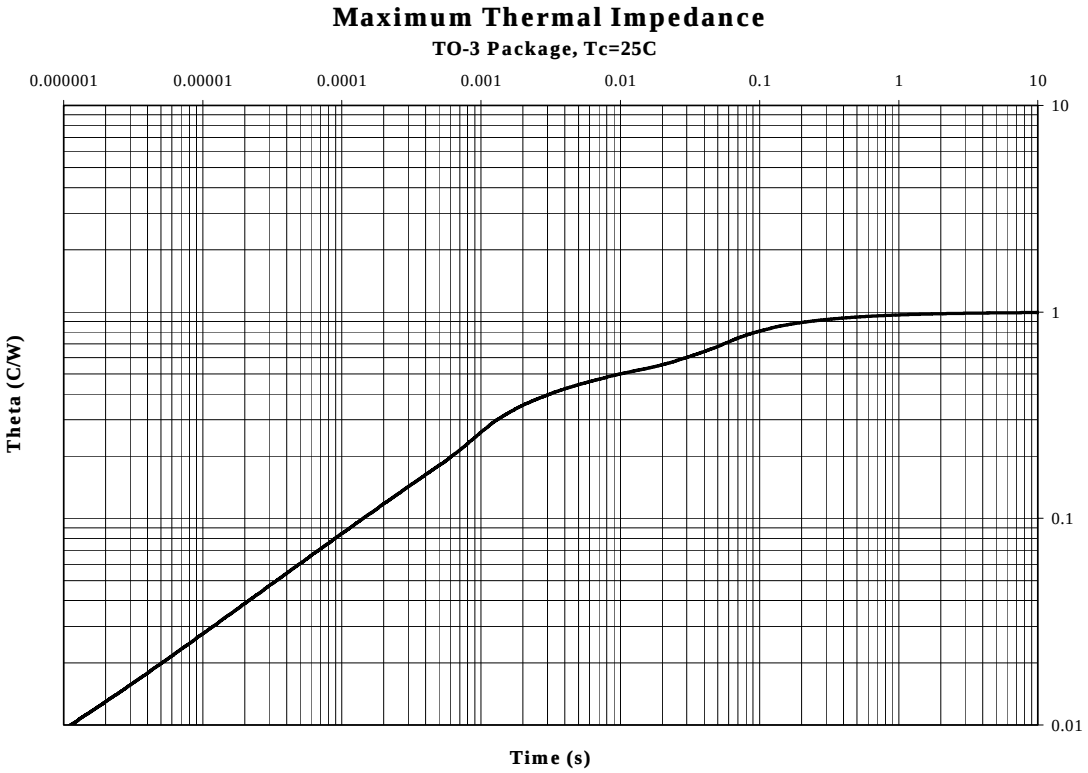
* TABLE II. Group E inspection (all quality levels) - for qualification and re-qualification only.

Inspection	MIL-STD-750		Qualification
	Method	Conditions	
Subgroup 1			45 devices c = 0
Temperature cycling	1051		
Hermetic seal	1071		
Fine leak Gross leak			
Electrical measurements		See table I, subgroup 2 herein.	
Subgroup 2			45 devices c = 0
Steady-state dc blocking life	1039 or 1049	Condition A; 1,000 hrs	
Electrical measurements		See table I, subgroup 2 herein.	
Subgroup 3			3 devices c = 0
DPA	2102		
Subgroup 4			N/A
Thermal impedance curves		Each supplier shall submit their (typical) design thermal impedance curves. In addition, test conditions and $Z_{\theta JX}$ limit shall be provided to the qualifying activity in the qualification report	
Subgroup 5			22 devices, c = 0
Barometric pressure	1001	Pressure = 8.0 mm Hg time = 60 seconds; normal mounting	
Subgroups 6 and 7			
Not applicable			
Subgroup 8			45 devices c = 0
Reverse stability	1033	Condition A for devices ≥ 400 V, condition B for devices < 400 V.	



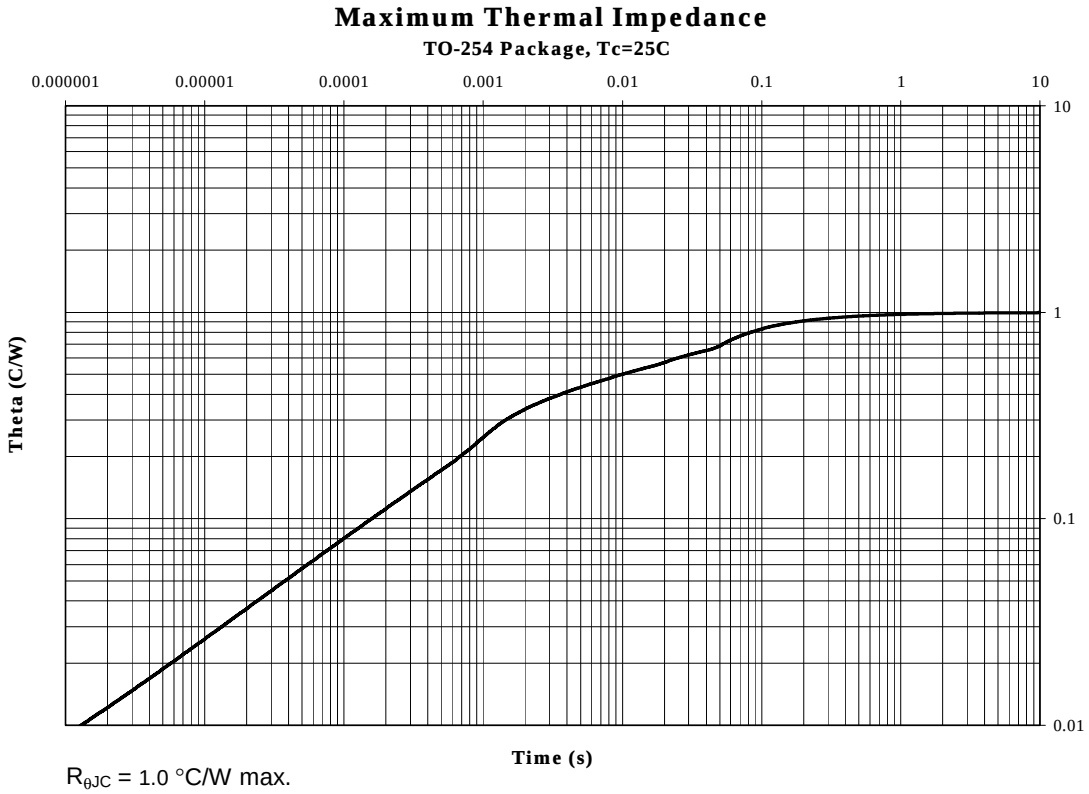


* FIGURE 4. Temperature-power derating curves.



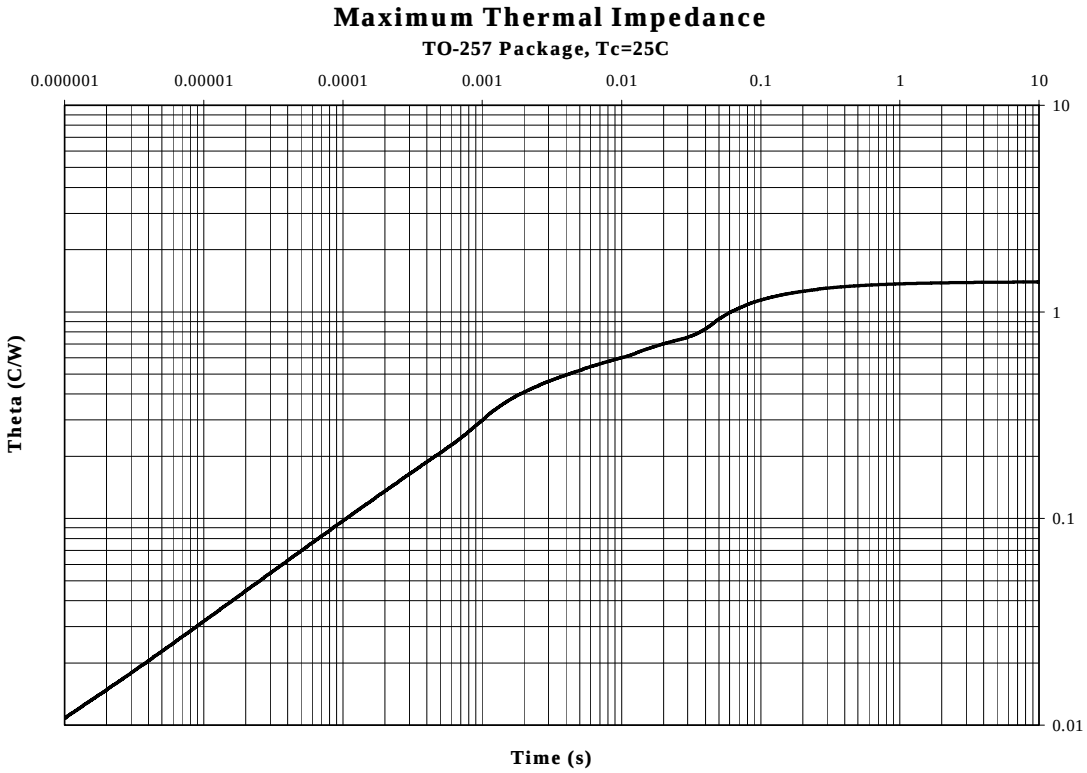
$R_{\theta JC}$ = 1.0 °C/W max., TO-3.

* FIGURE 5. Thermal impedance graph (2N6546 and 2N6547).



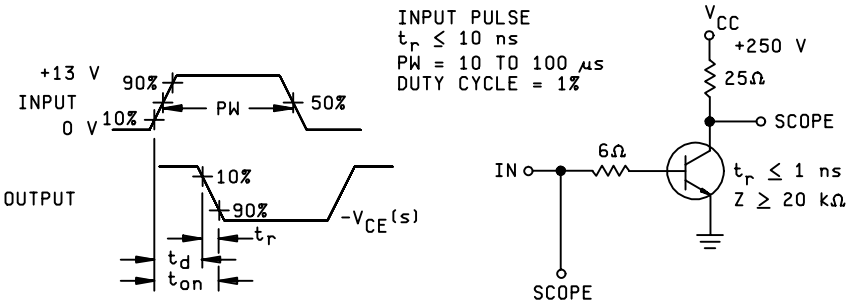
$R_{\theta JC}$ = 1.0 °C/W max.

* FIGURE 6. Thermal impedance graph (2N6546T1 and 2N6547T1).

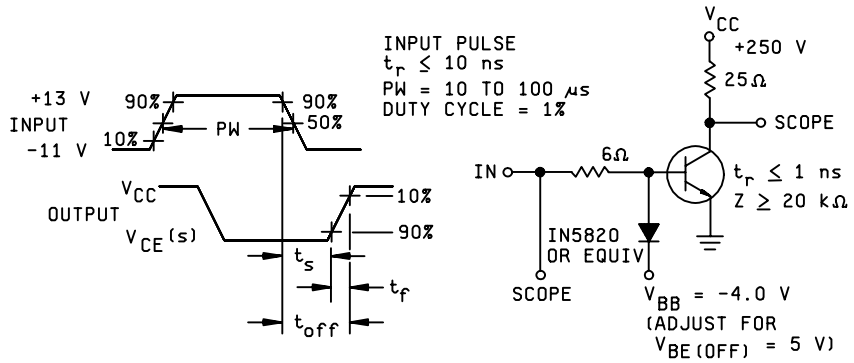


$R_{\theta JC}$ = 1.4 °C/W max.

* FIGURE 7. Thermal impedance graph (2N6546T3 and 2N6547T3).

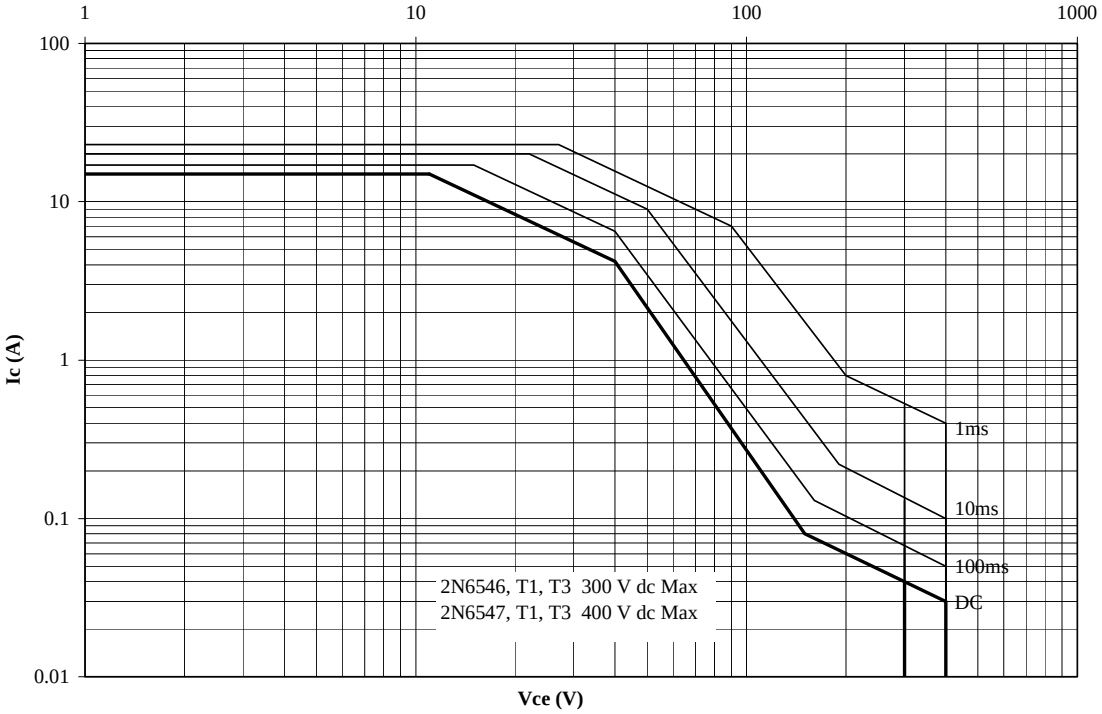


TURN-ON (t_{on}) TIME TEST CIRCUIT

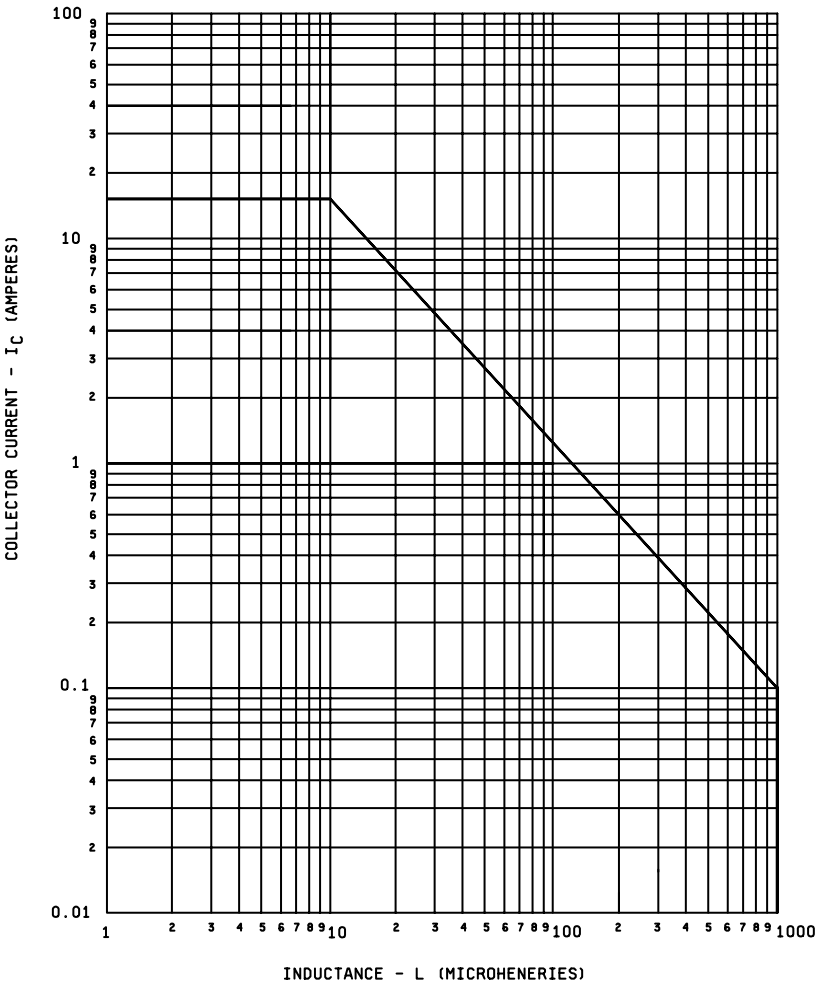


TURN-OFF (t_{off}) TIME TEST CIRCUIT

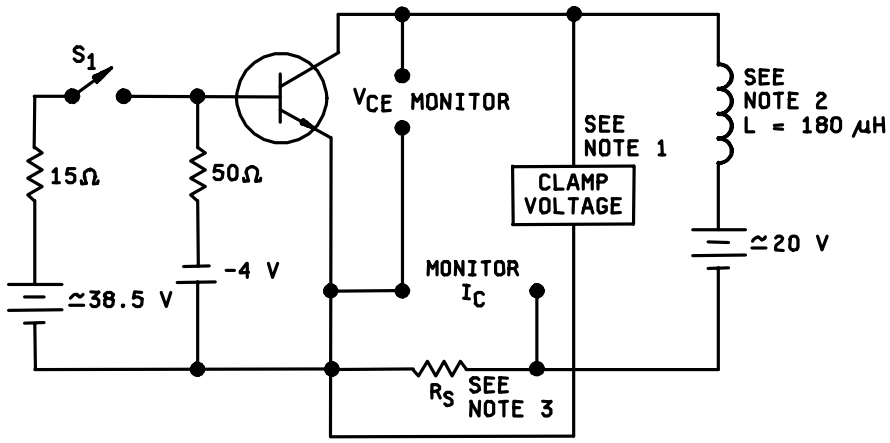
* FIGURE 8. Switching time test circuits.



* FIGURE 9. Maximum safe operating area graph (continuous dc).



* FIGURE 10. Safe operating area for switching between saturation and cutoff (unclamped inductive load, all devices).



NOTES:
1. Either a clamping circuit or clamping diode may be used.
2. The coil used shall provide a minimum inductance of 180 μH at 8 A with a maximum dc resistance of 0.05 ohm. For reference only: 2 each Miller type 7827 in parallel, or equivalent.
3. $R_S \leq .1$ ohm, 12 W, 1 percent tolerance maximum, (noninductive).

Procedure:
1. With switch S1 closed, set the specified test conditions.
2. Open S1. Device fails if clamp voltage not reached and maintained until current reaches zero.
3. Perform specified end-point tests.

* FIGURE 11. Clamped inductive sweep test circuit.

5. PACKAGING

5.1 Packaging. Packaging shall prevent mechanical damage of the devices during shipping and handling and shall not be detrimental to the device. When actual packaging of materiel is to be performed by DoD personnel, these personnel need to contact the responsible packaging activity to ascertain requisite packaging requirements. Packaging requirements are maintained by the Inventory Control Points' packaging activity within the Military Department or Defense Agency, or within the Military Departments' System Command. Packaging data retrieval is available from the managing Military Departments' or Defense Agency's automated packaging files, CD-ROM products, or by contacting the responsible packaging activity.

6. NOTES

(This section contains information of a general or explanatory nature that may be helpful, but is not mandatory.)

* 6.1 Intended use. The notes specified in MIL-PRF-19500 are applicable to this specification.

* 6.2 Acquisition requirements. Acquisition documents must specify the following:

a. Title, number, and date of this specification.

b. Issue of DODISS to be cited in the solicitation (see 2.2.1).

c. Lead finish (see 3.4.1).

d. Type designation and quality assurance level.

e. Packaging requirements (see 5.1).

* 6.3 Qualification. With respect to products requiring qualification, awards will be made only for products which are, at the time of award of contract, qualified for inclusion in Qualified Manufacturers' List (QML) whether or not such products have actually been so listed by that date. The attention of the contractors is called to these requirements, and manufacturers are urged to arrange to have the products that they propose to offer to the Federal Government tested for qualification in order that they may be eligible to be awarded contracts or orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center, Columbus, ATTN: DSCC/VQE, P.O. Box 3990, Columbus, OH 43216-5000.

* 6.4 Changes from previous issue. The margins of this specification are marked with asterisks to indicate where changes from the previous issue were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous issue.

Custodians:
Army - CR
Air Force - 11
NASA - NA
DLA - CC

Review activities:
Army - AR, MI
Air Force - 19, 99

Preparing activity:
DLA - CC

(Project 5961-2612)

STANDARDIZATION DOCUMENT IMPROVEMENT PROPOSAL

INSTRUCTIONS

1. The preparing activity must complete blocks 1, 2, 3, and 8. In block 1, both the document number and revision letter should be given.

2. The submitter of this form must complete blocks 4, 5, 6, and 7.

3. The preparing activity must provide a reply within 30 days from receipt of the form.

NOTE: This form may not be used to request copies of documents, nor to request waivers, or clarification of requirements on current contracts. Comments submitted on this form do not constitute or imply authorization to waive any portion of the referenced document(s) or to amend contractual requirements.

I RECOMMEND A CHANGE:	1. DOCUMENT NUMBER MIL-PRF-19500/525C	2. DOCUMENT DATE 10 March 2003

3. **DOCUMENT TITLE**

SEMICONDUCTOR DEVICE, TRANSISTOR, NPN, SILICON, POWER TYPES 2N6546, 2N6546T1, 2N6546T3, 2N6547, 2N6547T1, AND 2N6547T3, JAN, JANTX, AND JANTXV

4. NATURE OF CHANGE (Identify paragraph number and include proposed rewrite, if possible. Attach extra sheets as needed.)

5. REASON FOR RECOMMENDATION

6. SUBMITTER

a. NAME (Last, First, Middle initial)	b. ORGANIZATION	
c. ADDRESS (Include Zip Code)	d. TELEPHONE (Include Area Code) COMMERCIAL DSN FAX EMAIL	7. DATE SUBMITTED

8. PREPARING ACTIVITY

a. Point of Contact Alan Barone	b. TELEPHONE Commercial 614-692-0510	 DSN 850-0510	 FAX 614-692-6939	 EMAIL alan.barone@dla.mil
c. ADDRESS Defense Supply Center Columbus ATTN: DSCC-VAC P.O. Box 3990 Columbus, OH 43216-5000	IF YOU DO NOT RECEIVE A REPLY WITHIN 45 DAYS, CONTACT: Defense Standardization Program Office (DLSC-LM) 8725 John J. Kingman, Suite 2533 Fort Belvoir, VA 22060-6221 Telephone (703) 767-6888 DSN 427-6888			