The documentation and process conversion measures necessary to comply with the revision shall be completed by 9 November 1999

INCH-POUND

MIL-PRF-19500/520C
9 August 1999
SUPERSEDING
MIL-S-19500/520B
20 April 1992

PERFORMANCE SPECIFICATION SHEET

SEMICONDUCTOR DEVICE, DIODE, LIGHT EMITTING, YELLOW TYPES JAN1N6093 JANTX1N6093, JAN1N6610 (CLEAR LENS) JANTX1N6610 (CLEAR LENS), AND PANEL MOUNTED ASSEMBLY TYPES JANM19500/52001, JANTXM19500/52002, JANM19500/52003 (CLEAR LENS), AND JANTXM19500/52004 (CLEAR LENS)

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 JAN and JANTX yellow light-emitting diodes (LED) in a hermetic-sealed can and panel mount assemblies made from the same hermetic light emitting diode units. See 6.2 for an explanation of Part or Identifying Number (PIN). Two levels of product assurance are provided for each device type as specified in MIL-PRF-19500.

1.2 Physical dimensions. See figures 1 and 2.

1.3 Maximum ratings.

I_F	I_P 1/	I_{ptr} 2/	$V_{(BR)}$ 3/	P_{FM} 4/	T_{op} and T_{stg}
mA dc	mA(pk)	A (pk)	V dc	mW(pk)	°C
35	60	1.0	5	120	-65 to +100

1/ Pulse width maximum 0.5 ms and $P_{FM(AV)}$ less than P_F.
2/ I_{ptr} = 1 μs pulse width, 300 pulses per second (pps).
3/ I_R = 10 μA dc.
4/ Derate linearly from +50°C at 1.6 mW/°C.

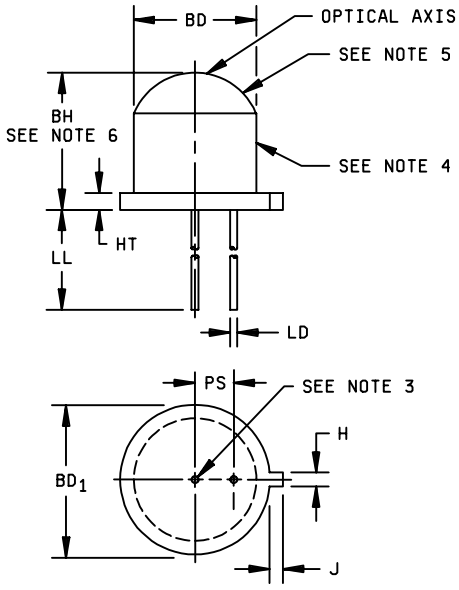
1.4 Characteristics, radiometric (physical), and photometric (visual).

Limits	I_{V1} I_F = 20 mA dc Θ = 0°		I_{V2} I_F = 20 mA dc Θ = 30°	V_F I_F = 20 mA dc	λ_V (wave length)	I_R V_R = 3 V	C V_R = 0 f = 1 MHz	Color
	mcd		mcd	V dc	nm	μA dc	pF	Nm
	1/	2/						Yellow
Min	3.0	20.0	1.5		550			
Max				3.0	660	1	100	

1/ Applies to JAN1N6093, JANTX1N6093, JANM19500/52001 AND JANTXM19500/52002.
2/ Applies to JAN1N6610, JANTX1N6610, JANM19500/52003 AND JANTXM19500/52004.

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

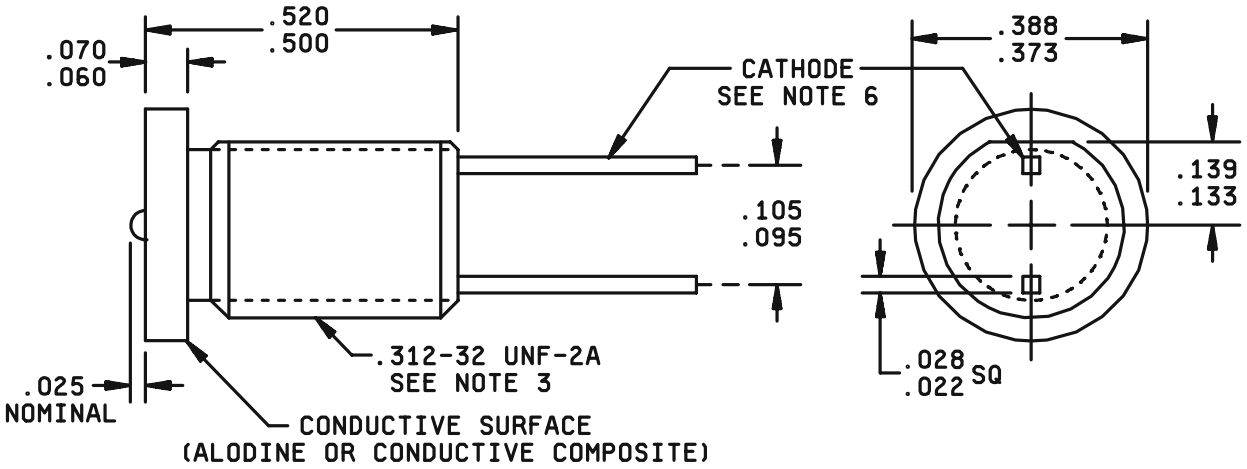
AMSC N/A FSC 5980



Ltr	Dimensions			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.176	0.190	4.47	4.83
BH	0.180	0.225	4.57	5.72
HT	0.013	0.024	0.33	0.61
LL	0.970	1.030	24.64	26.16
LD	0.016	0.019	0.41	0.48
PS	0.045	0.055	1.14	1.40
BD_1	0.200	0.220	5.08	5.59
H	0.035	0.045	0.89	1.14
J	0.032	0.042	0.81	1.07

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. Cathode lead; both leads isolated from case.
4. Glass/metal hermetic can.
5. Colored lens or clear glass lens (see 6.2).
6. For sunlight viewable LED's, dimension BH is 0.213 in (5.41 mm) minimum and 0.260 (6.60) maximum (see 6.2)..

FIGURE 1. Physical dimensions for types JAN1N6093, JANTX1N6093, JAN1N6610 and JANTX1N6610.



Inches	mm	Inches	mm
0.022	0.56	0.133	3.38
0.025	0.64	0.139	3.53
0.028	0.71	0.373	9.47
0.060	1.52	0.388	9.86
0.070	1.78	0.500	12.70
0.095	2.41	0.520	13.21
0.105	2.67	0.583	14.81

NOTES:
1. Dimensions are in inches.
2. Metric equivalents are given for general information only.
3. The panel mount sleeve is either black conductive composite with a tensile strength of 35,000 psi and surface resistivity of 100 ohms per square inch, black anodized aluminum, or black finished zinc.
4. Mounting hardware, which includes one lock washer and one hex nut, is included with each panel mountable hermetic solid state lamp.
5. Use of metric drill size 8.20 millimeters or English drill size P (0.323 inch) is recommended for producing hole in the panel for panel mounting.
6. Both leads are isolated from the panel mount by nonconductive potting. Lead length is 0.500 in Min, 0.583 in Max
7. Conductive surface may extend to threaded area.

FIGURE 2. Semiconductor device, diode, types JANM19500/52001, JANTX19500/52002, JANM19500/52003, and JANTXM19500/52004 panel mount assemblies.

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 Defense Automated Printing Service, Building 4D (DPM-DODSSP), 700 Robbins Avenue, Philadelphia, PA 19111-5094.)

2.3 Non-Government publications. The following documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of the documents which are DoD adopted are those listed in the issue of the DODISS cited in the solicitation. Unless otherwise specified, the issues of documents not listed in the DODISS are the issues of the documents cited in the solicitation (see 6.2).

AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI)

ANSI Z7.1-1967 - Nomenclature and Definitions for Illuminating Engineering.

(Application for copies should be addressed to American National Standards Institute, 1430 Broadway, New York, NY 10018.)

(Non-Government standards and other publications are normally available from the organizations that prepare or distribute the documents. These documents also may be available in or through libraries or other informational services.)

2.4 Order of precedence. In the event of a conflict between the text of this document and the references cited herein (except for related associated specifications or specification sheets), the text of this document takes precedence. Nothing in this document, however, supersedes applicable laws and regulations unless a specific exemption has been obtained.

3. REQUIREMENTS

3.1 Qualification. Devices furnished under this specification shall be products that are authorized by the qualifying activity for listing on the applicable qualified manufacturer's list before contract award (see 4.2 and 6.6).

3.2 Associated specification. The individual item performance requirements shall be in accordance with MIL-PRF-19500, and as specified herein.

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

a. I_P ..... Peak operating forward pulse current.

b. I_{ptr} ..... Peak transient forward current.

c. I_V ..... Luminous intensity (the subscript V is used to designate a photometric or visual quantity to differentiate from I as used herein for current).

d. mcd ..... Milli-candela; the candela is a unit of luminous intensity defined such that the luminance of a blackbody radiator at the temperature of solidification of platinum is 60 candelas per square centimeter.

e. λ_V ..... Peak radiometric wavelength of diode light emission.

f. Θ ..... The angle at or off the axis of symmetry of a light source at which luminous intensity is measured.

g. LED ..... Light emitting diode.

3.4 Interface requirements and physical dimensions. The interface requirements and physical dimensions shall be as specified in MIL-PRF-19500 and on figures 1 and 2 herein. The US Government's preferred system of measurement is the metric SI system. However, since this item was originally designed using inch-pound units of measurement, in the event of conflict between the metric and inch-pound units, the inch-pound units shall take precedence.

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

3.4.2 Terminal lead length. Terminal lead lengths other than that specified on figures 1 and 2 may be furnished when so stipulated in the acquisition document (see 6.2) where the devices covered herein are required directly for particular equipment-circuit installation or for automatic-assembly-technique programs.

3.5 Marking. Devices shall be marked as specified in MIL-PRF-19500.

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

3.7 Electrical test requirements. The electrical test requirements shall be the subgroups specified in tables I and II herein.

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).

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

4.3 Screening (JANTX level 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 level
2	As given, except condition shall be 24 hours minimum at maximum rated storage temperature.
3	$T_{upper\ extreme}$ =100°C, +0°C, - 3°C.
7	As given, except for the fine leak test, condition G, testing 2 hours after pressurization is acceptable and for the gross leak test, the device temperature shall be maintained at 100°C ± 5°C.
9 and 10	Not applicable
11	I_{V1}, V_F
12	I_F = 35 mA dc; T_A = +25°C, t = 96 hours.
13	Subgroup 2 of table I herein; ΔI_{V1} = -20 percent of initial readings. ΔV_F =± 50 mV dc

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

a. If the manufacturer chooses the following option(s) for testing, the sample units that are to be used in group C inspection shall be designated as such prior to conducting the referenced group B tests. Moreover, the number of failed diodes to be counted for lot acceptance or rejected as a result of group C test shall be equal to all failed diodes of the test in group B inspection, which were predesignated for use in group C inspection, plus any additional failures occurring group C testing. For each life test in group C inspection, the manufacturer has the option of using all or a portion of the sample already subjected to 340 hours of group B life testing for an additional 660 hours of testing to meet the 1,000 hour requirement.

b. Panel mount assemblies shall be assembled with LEDs that have met the requirements of groups A, B and C, and the applicable screening requirements specified herein. The quality conformance inspection for panel mount assemblies shall consist of the examinations and inspections specified in table II herein.

4.4.1 Group A inspection. Group A inspection shall be conducted in accordance with table V of MIL-PRF-19500, and tables I and II herein.

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

4.4.2.1 Group B inspection, table VIb of MIL-PRF-19500.

Subgroup	Method	Condition
2	1051	Test condition A, except $T_{(high)}$ = +100°C (25 cycles); time at temperature extremes 10 minutes minimum.
2	1071	Fine leak: test condition G or H (for condition H, leak testing 2 hours after pressurization is acceptable). Gross leak: test condition A, C, D, E, J or K except that leak indicator fluid shall be maintained at +100°C ± 5°C.
3	1027	I_F = 35 mA dc; T_A = +25°C; t = 340 hours + 72, - 24 hours (see 4.4a).

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 and as follows. Electrical measurements (end-points) shall be in accordance with the inspections of table I, subgroup 2 herein.

4.4.3.1 Group C inspection, table VII of MIL-PRF-19500.

Subgroup	Method	Condition
2	1056	Test condition A.
2	2036	Test condition E.
2	1071	Fine leak: test condition G or H (for condition H, leak testing 2 hours after pressurization is acceptable). Gross leak: test condition A, C, D, E, J or K except that leak indicator fluid shall be maintained at +100°C ± 5°C.
3	2016	Nonoperating; 1,500 G's; t = 0.5 ms; 5 blows in each orientation: X1, Y1, and Y2.
3	2056	Nonoperating.
3	2006	Nonoperating; 20,000 G's; X1, Y1, and Y2, one minute in each orientation.
6	1026	I_F = 35 mA dc; T_A = +25°C 1,000 hours.
7		Peak forward pulse current (transient); t_P = 1 μs, pps = 300, total test time = 5 s, I_{prt} = 1.0 A (pk)
8		t_P = 0.5 ms, $P_{FM} \leq$ 120 mw, T_A = +25°C, I_P = 60 mA, 500 hours.

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

4.5.1 Axial luminous intensity. This measurement is made with a photometer described, calibrated, and operated as follows.

4.5.1.1 Description of photometer.

4.5.1.1.1 Type of response. The photometer shall be of a type that is designed to respond to illuminance or (luminous incidence), that is, incident luminous flux density or lumens per unit area. Units for luminous incidence are lux (lm/m^2). The output of the photometer shall be linearly related to luminous incidence over the range of levels encountered in calibration and measurement. The output may be a voltage or a current, or may be rendered directly in the units of luminous incidence.

4.5.1.1.2 Spectral response. The relative response of the photometer shall be within 6 percent of v(λ) at all wavelengths within the effective spectrum of devices to be measured, where v(λ) is the photopic spectral luminous efficiency value as given in ANSI Z7.1-1967. The effective spectrum for a given type of device extends from the minimum to the maximum value of λv in 1.4.

4.5.1.1.3 Receptance pattern. The off-axis receptance of the photometer shall be constant over a large enough angle that it responds equally to light from all parts of the device to be measured. An effective plane of receptance (image of the detecting surface) shall be defined with respect to which the calibration can be performed.

4.5.1.2 Calibration of photometer. Radiation from a certified (NBS traceable) standard of spectral radiant incidence produces at its specified reference plane a known level of spectral radiant incidence, $E_e(\lambda)$ ($\mu W/cm^2$ per nanometer of wavelength). By passing this radiation through an interference filter of known spectral transmittance, τ_λ in a narrow band (<20 nm) centered at λ_0 (a dimensionless function of wavelength), a narrow band of spectral radiant incidence, $E_e(\lambda)\ \tau_e(\lambda)$ is obtained. This is converted to luminous incidence by integration:

$$E_v(\lambda)o \;=\; 6.80 \int_0^{\infty} \left[\; E_e(\lambda)\ \tau_e\ (\lambda)\right] v(\lambda)\, d\lambda$$

Where: $E_V(\lambda_0)$ = luminous incidence (lux) at the reference plane of the standard of spectral radiant incidence, for a wavelength,

$$\lambda_o \;\approx\; \lambda_v(avg) \;=\; \frac{\lambda_v(\min) \;+\; \lambda_v(\max)}{2}$$

[$E_e(\lambda)\ e(\lambda)$] = spectral radiant incidence ($\mu W/cm^2/nm$) resulting from passing the flux from the standard of spectral radiant incidence $E_e(\lambda)$ through a filter of spectral transmittance $\tau_e(\lambda)$.

$V(\lambda)$ = Photopic spectral luminous efficiency value as given in ANSI 27.1-1967.

6.80 = Units conversion constant (lux per $\mu W/cm^2$/) obtained from the product of 680 lumens per watt, the peak of the standard observer response, and 10,000 cm^2/m^2.

With the photometer receptance plane at the reference plane of the standard of spectral radiant incidence, the luminous incidence thus calculated (in lux) is applied. The response of the photometer, to this standard luminous incidence is $P_{std}(\lambda_o)$.

4.5.1.3 Operation of photometer. The LED to be measured is aligned at the angle specified in 1.4, and at a known distance, d (meters) from the receptance plane of the photometer. Specified drive current is applied to the LED and the luminous intensity is computed from the resulting photometer indications, P_{LED}:

$$I_{v_{LED}} \;=\; \frac{P_{LED}}{P_{std}\ (\lambda_o)} \bullet E_v\ (\lambda_o) \bullet d^2$$

where Iv_{LED} = luminous intensity of the LED (candelas).

$\frac{P_{LED}}{P_{std}(\lambda_o)}$ = ratio of photometer response from LED to response from standard luminous incidence.

$E_V(\lambda_o)$ = standard luminous incidence (lux) calculated as above.

d = distance (meters) from emittance plane of LED to receptance plane of photometer.

NOTE: Use of the wavelength designator, λ_o implies only that the photometer response was calibrated at that wavelength. The interference filter should not be used with the photometer during measuring; it is used only for calibration.

TABLE I. Group A inspection.

Inspection 1/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
Subgroup 1						
Visual and mechanical inspection	2071					
Subgroup 2						
Luminous intensity		Θ = 0° (see 3.3f and 4.5.1) I_F = 20 mA dc	I_{V1}	3.0 2/ 20.0 3/		mcd mcd
Luminous intensity 2/		Θ = 30°; I_F = 20 mA dc	I_{V2}	1.5		mcd
Reverse current	4016	DC method; V_R = 3 V dc	I_R		1.0	µA dc
Forward voltage	4011	DC method, I_F = 20 mA dc	V_F		3.0	V dc
Subgroup 3						
High temperature:		T_A = +100°C				
Reverse current	4016	DC method; V_R = 3 V dc	I_R		1.0	µA dc
Forward voltage	4011	DC method, I_F = 20 mA dc	V_F		3.0	V dc
Low temperature:		T_A = -55°C				
Reverse current	4016	DC method; V_R = 3 V dc	I_R		1.0	µA dc
Forward voltage	4011	DC method, I_F = 20 mA dc	V_F		3.0	V dc
Subgroup 4						
Capacitance	4001	V_R = 0; f = 1 MHz	C		100	pF
Subgroups 5, 6, and 7						
Not applicable						

1/ For sampling plan, see MIL-PRF-19500.
2/ Applies to JAN1N6093 and JANTX1N6093.
3/ Applies to JAN1N6610 and JANTX1N6610.

TABLE II. Group A inspection for panel mount assemblies.

Inspection 1/	MIL-STD-750		Symbol	Limits		Unit
	Method	Conditions		Min	Max	
Subgroup 1						
External visual examination	2071					
Subgroup 2						
Luminous intensity		$\Theta = 0°$ (see 3.3f and 4.5.1) I_F = 20 mA dc	I_{V1}	3.0 2/ 20.0 3/		mcd mcd
Luminous intensity 2/		$\Theta = 30°$; I_F = 20 mA dc	I_{V2}	1.5		mcd
Reverse current	4016	DC method; V_R = 3 V dc	I_R		1.0	µA dc
Forward voltage	4011	DC method, I_F = 20 mA dc	V_F		3.0	V dc
Subgroup 3, 4, 5 and 6						
Not applicable						
Subgroup 7						
Solderability 4/	2026	15 devices, c = 0				
Resistance to solvents	1022	(Omit 2.1d of method 1022), 45 devices, c = 0				
Physical dimensions	2066	See figure 2, 45 devices, c = 0				

1/ For sampling plan, see MIL-PRF-19500.
2/ Applies to JAN19500/52001 and JANTX19500/52002.
3/ Applies to JANM19500/52003 and JANTX19500/52004.
4/ The sample plan for solderability test applies to the number of leads inspected except in no case shall less that three leads be used to provide the number of leads required.

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 material 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 Notes. The notes specified in MIL-PRF-19500 are applicable to this specification.

6.2 Acquisition requirements. See MIL- PRF-19500 , and as follows:

a. Lead finish if other than gold plated (see 3.4.1).

b. Terminal lead length if other than as specified on figure 1 (see 3.4.2).

c. Specify the PIN for the LED or panel mount assembly as listed below.

JAN1N6093	JAN LED, yellow, diffused lens.
JANTX1N6610	JANTX LED, yellow, diffused lens.
JAN1N6610	JAN LED, clear lens, yellow, sunlight viewable.
JANTX1N6610	JANTX LED, clear lens, yellow, sunlight viewable.
JANM19500/52001	JAN panel mount, LED, diffused lens yellow.
JANTXM19500/52003	JAN panel mount LED, clear lens, yellow sunlight
JANM 19500/5204	JAN panel mount, LED clear lens, yellow. Sunlight viewable.
JANTXM19500/52004	JANTX panel mount LED, clear lens, yellow, sunlight viewable.

Sunlight viewable – for applications requiring readability in bright sunlight (see 6.4.1).

6.3 Applications. These light emitting diodes are primarily intended for use as visible indicators (ON or OFF) of status. Intensity is easily modulated by varying the forward current, so the level can be adjusted to suit ambient light conditions. The modulation rate capability can be high enough to accommodate video signals. Diodes may be operated in either direct current or pulsed mode depending upon current availability. Pulsed operation is desireable as a means of linear control of average intensity or of improving the average efficiency (ratio of average intensity to average current). For panel applications, panel mounts should be used. Figure 2 provides information on mounting technique and hardware. The metal-can package provides precise and consistant mechanical surfaces for mounting and optical alignment.

6.4 Operating considerations. Under normal ambient light conditions (300 to 1,000 lux), a typical forward current of 6 mA is required to produce an adequate on-state luminous intensity. This current level is directly compatible with TTL devices, and only simple buffering is needed when operating from LSTTL, LTTL, CMOS, etc. No consideration of inrush current or keep-alive voltage is necessary.

6.4.1 Design considerations. Design consideration should include: Ambient light level and color; viewing background, color and texture; observer, attentiveness, position and operator accessories (glasses, goggles, etc). Where ambient light levels are so high that it is difficult to distinguish between the LED on condition and glint (reflection of light from the surface of the LED lens), a modulated current causing a visible flicker in the LED at 10 Hz is recommended. Color filters, louvered filters and circular polarizing filters may enhance the desired visual effects of the LED. For applications in bright sunlight, sunlight viewable types are recommended. With the proper enhancement filter, these parts are readable in sunlight ambient conditions.

6.5 Reliability considerations. There is a correlation between LED luminous intensity degradation and operating current levels. To lengthen the useful life of this device, drive current should be held to a minimum consistent with use conditions: Luminous intensity would have to change by more than 50 percent before becoming apparent to the causal observer.

6.6 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 Manufacturer’s List QML No.19500 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 purchase orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from Defense Supply Center Columbus, DSCC - VQE, 3990 E. Broad Street, Columbus, OH 43216.

6.7 Applications. These LED's are primarily intended for use as printed circuit board mounted fault indicator lights. They also readily lend themselves to other types of applications, such as logic status indicators and power supply on/off indicators.

6.8 Changes from previous issue. Marginal notations are not used in this revision to identify changes with respect to the previous issue due to the extent of the changes.

Custodians:
Army - CR
Air Force – 11
DLA - CC

Preparing activity:
DLA – CC

(Project 5980-A021)

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-19500/520C	2. DOCUMENT DATE 990809

3. **DOCUMENT TITLE**
SEMICONDUCTOR DEVICE, DIODE, LIGHT EMITTING, YELLOW TYPES JAN1N6093, JANTX1N6093, JAN1N6610 (CLEAR LENS) JANTX1N6610 (CLEAR LENS), AND PANEL MOUNTED ASSEMBLY TYPES JANM19500/52001, JANTXM19500/52002, JANM19500/52003 (CLEAR LENS), AND JANTXM19500/52004 (CLEAR LENS)

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@dscc.dla.mil
c. ADDRESS Defense Supply Center Columbus, ATTN: DSCC-VAC, 3990 East Broad Street, 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