



DEFENSE LOGISTICS AGENCY
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August 27, 2026

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Initial Draft of Performance Specification Sheet MIL-PRF-19500/469 Rev F with Amendment 2; Project Number 5961-2026-081.

The initial draft of the subject document, dated August 27, 2026, is now available for viewing and downloading from the ASSIST or DLA Weapons Support (Columbus) -VA websites using following URLs:

<https://assist.dla.mil>

or

<https://landandmaritimeapps.dla.mil/programs/milspec/default.aspx>

The initial draft of the subject document was generated to perform and overage review and update format to be in compliance with MIL-STD-961. Highlighting has been used to allow for easy recognition of changes.

Device types covered by MIL-PRF-19500/469 include M19500/469-01, -02, -03, -04, and -05

If this document is of interest to you, please provide your concurrence or comments to this Center by the date indicated on the ASSIST or DLA Weapons Support electronic mail notification and not 30 days from the date of this letter or the date on the draft document. Late comments will be held for the next coordination of the document. Comments from military departments must be identified as either "Essential" or "Suggested". Essential comments must be justified with supporting data. Military review activities should forward comments to their custodians or this office, as applicable, in sufficient time to allow for consolidating the department reply. If no response is received from your activity in the allotted coordination cycle, concurrence will be assumed.

The point of contact for this action is Mr. David Corbett, DLA Weapons Support (Columbus), ATTN: VAC, Post Office Box 3990, Columbus, OH 43218-3990. Mr. Corbett can also be reached by phone at 614-693-0168 or by e-mail david.corbett@dlamail.mil.

Sincerely,

MUHAMMAD AKBAR
Chief,
Active Devices Branch

The documentation and process conversion measures necessary to comply with this document shall be completed by 90 days from date.

INCH-POUND

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT
SUPERSEDING
MIL-PRF-19500/469F
w/AMENDMENT 1
6 May 2021

PERFORMANCE SPECIFICATION SHEET

RECTIFIER, SEMICONDUCTOR DEVICE, UNITIZED, SILICON,
HIGH-POWER, SINGLE PHASE, FULL WAVE BRIDGE RECTIFIER,
TYPES M19500/469-01, -02, -03, -04, AND -05,
QUALITY LEVELS JANTX AND JANTXV

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

The requirements for acquiring the product described herein shall consist of
this specification sheet and [MIL-PRF-19500](#).

1. SCOPE

1.1 Scope. This specification covers the performance requirements for silicon, single phase, full wave bridge rectifiers, intended for use in applications at frequencies of 1 kHz or less. Two levels of product assurance (JANTX and JANTXV) are provided for each device type as specified in [MIL-PRF-19500](#).

1.2 Physical dimensions. See [figure 1](#).

1.3 Maximum ratings. Unless otherwise specified, T_A = +25 °C.

1.3.1 Ratings applicable to all Part or Identifying Numbers (PIN). Operating temperature: -65 °C to +150 °C.
Storage ambient temperature: -65 °C to +150 °C.

1.3.2 Ratings applicable to individual types.

Types	V _{RWM}	Bridge (1) I _{O1} at T _C = +55°C	Bridge (2) I _{O2} at T _C = +100°C	I _F (surge) I _O = 10 A dc T _C = +55°C t _p = 8.3 ms	Barometric pressure reduced	t _{rr} I _F = 0.5 A I _R = 1.0 A I _{rec} = 0.25 A
M19500/469-	V (pk)	A dc	A dc	A (pk)	mm Hg	µs
01	200	10	6	100	8	2.5
02	400	10	6	100	8	2.5
03	600	10	6	100	8	2.5
04	800	10	6	100	33	2.5
05	1,000	10	6	100	33	2.5

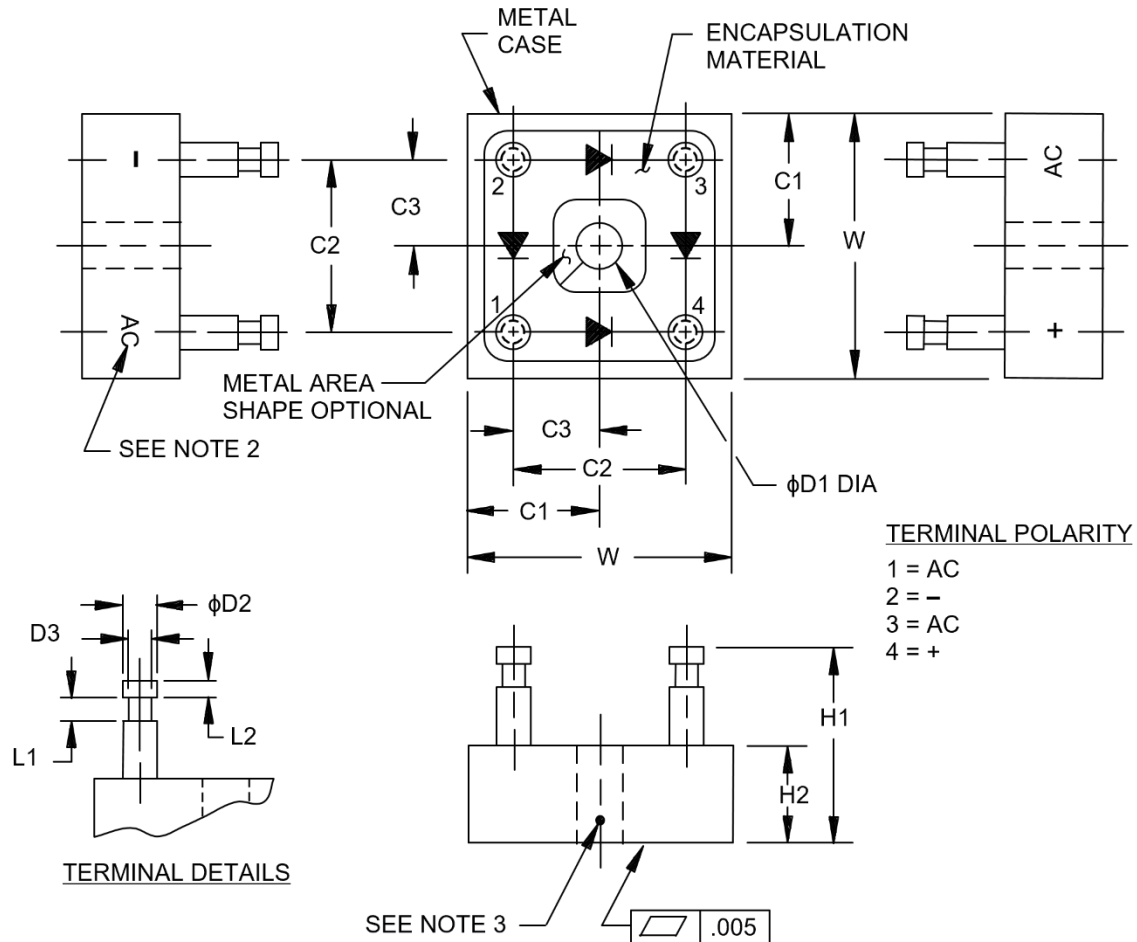
- (1) Derate from 10 A dc at T_C = +55 °C to 6 A dc at +100 °C (88 mA dc/°C).
(2) Derate from 6 A dc at T_C = +100 °C to 0 A dc at +150 °C (120 mA dc/°C),

Comments, suggestions, or questions on this document should be addressed to DLA [Weapons Support Land and Maritime](#), ATTN: VAC, P.O. Box 3990, Columbus, OH 43218-3990, or emailed to Semiconductor@dla.mil. Since contact information can change, you may want to verify the currency of this address information using the ASSIST Online database at <https://assist.dla.mil>.

AMSC N/A

DISTRIBUTION STATEMENT A. Approved for public release. Distribution is unlimited.





NOTES:

1. Dimensions are in inches. Millimeters are given for general information only.
2. Polarity shall be marked on the bridge body adjacent to terminals. Terminal numbers are for reference and are not required to be marked on the bridge; however, terminal 1 shall be indicated by a mechanical index such as a line or flattened corner, visible from the top (terminal surface) of the device.
3. Point at which T_c is read shall be in metal part of case as shown on drawing.
4. In accordance with ASME Y14.5, diameters are equivalent to $\varnothing$ x symbology.

Symbol	Dimensions			
	inch	inch	mm	mm
	Min	Max	Min	Max
C1	.367	.375	9.32	9.53
C2	.350	.450	8.89	11.43
C3	.175	.225	4.45	5.72
$\phi D1$	.139	.149	3.53	3.78
$\phi D2$	.091	.101	2.31	2.57
$\phi D3$	.066	.076	1.68	1.93
H1		.570		14.48
H2		.370		9.40
L1	.088	.098	2.24	2.49
L2	.020	.030	0.51	0.76
W	.735	.750	18.67	19.05

FIGURE 1. Physical dimensions for bridge rectifier assembly.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

1.5 Part or Identifying Number (PIN). The PIN is in accordance with MIL-PRF-19500, and as specified herein. See 6.4 for PIN construction example and 6.5 for a list of available PINs.

1.5.1 JAN certification mark and quality level. The "JAN" certification mark and quality level designators for encapsulated devices that are applicable for this specification sheet from the lowest to the highest level are as follows: "TX" and "TXV".

1.5.2 Specification designation. The military specification PIN based designation system uses "M19500" followed by the specification sheet number "469" preceded by a slash.

1.5.3 Dash numbers. The dash number is a sequential two digit number ("01" through "05") that uniquely identifies the bridge rectifier (see 1.3.2) preceded by a dash.

1.5.4 Lead finish. The lead finishes applicable to this specification sheet are listed on QPDSIS-19500.

2. APPLICABLE PUBLICATIONS DOCUMENTS

2.1 General. The publications documents listed in this section are specified in sections 3 and 4 of this specification. This section does not include publications 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 of publications documents cited in sections 3 and 4 of this specification, whether or not they are listed.

2.2 Government publications documents.

2.2.1 Specifications, standards, and handbooks. The following specifications, standards, and handbooks form a part of this publications documents to the extent specified herein. Unless otherwise specified, the issues of these publications documents are those cited in the solicitation or contract.

DEPARTMENT OF DEFENSE SPECIFICATIONS

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

DEPARTMENT OF DEFENSE STANDARDS

MIL-STD-750 – Test Methods For Semiconductor Devices.

(Copies of these publications documents are available online at <https://quicksearch.dla.mil>.)

2.2.2 Non-Government publications. The following publications documents form a part of this document to the extent specified herein. Unless otherwise specified, the issues of these publications documents are those cited in the solicitation or contract.

SAE INTERNATIONAL (SAE)

AS39029/57 - Contacts, Electrical Connectors, Socket Crimp Removable (For MIL-DTL-24308, MIL-DTL-38999 Series II, MIL-DTL-55302/68, /71, /72, /75 and MIL-DTL-83733 Connectors)

(Copies of these publications documents are available from <https://www.sae.org>.)

2.3 Order of precedence. Unless otherwise noted herein or in the contract, in the event of a conflict between the text of this document and the references cited herein, 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 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 authorized by the qualifying activity for listing on the applicable qualified products list 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 and as follows:

N Number of diodes for each leg.

3.4 Interface and physical dimensions. Interface and physical dimensions shall be as specified in MIL-PRF-19500 and on figure 1.

3.4.1 Internal construction. The bridge rectifier shall consist of a metal and plastic encased assembly of single or parallel discrete diodes.

3.4.1.1 Discrete diodes. Each discrete diode shall be a glass-to-metal, ceramic-to-metal, or fused metal oxide-to-metal hermetically sealed package. The silicon die in each discrete diode shall be metallurgically bonded directly to the terminal pins. Discrete diodes shall be JANTX or JANTXV level devices, or equivalent screened non-JAN devices manufactured in a MIL-PRF-19500 certified facility. Only those discrete diodes which have met these requirements shall be used in the rectifier bridge.

3.4.1.2 Completed assemblies. The completed assembly of diodes and other internal structures shall be encapsulated in a plastic material which polymerizes to a rigid condition by virtue of a chemical cross-linking mechanism. The bridge rectifier shall be free of voids either visible or as evidenced by failure to pass the environment test specified.

3.4.2 Terminal finish. Terminal finish shall be solderable in accordance with MIL-PRF-19500, MIL-STD-750, and herein. Where a choice of terminal finish is desired, it shall be specified in the acquisition document (see 6.2).

3.4.3 Parallel diode construction. For bridge rectifier design that employs more than one diode per leg and equals the number of diodes per leg, the following design and matching conditions shall be approved by the qualifying activity.

- a. Individual diode V_F matching at least the minimum rated room temperature I_O . The V_F shall be to within 20 mV on each diode.
- b. Thermal impedance matching.
- c. Similar diode families types shall be utilized.
- d. The design shall ensure similar lead lengths and uniform heat paths, so that all diodes in each leg are at similar junction temperatures.

3.5 Marking. Marking shall be in accordance with MIL-PRF-19500. Manufacturer's identification and date code shall be marked on the devices. Initial container package marking shall be in accordance with MIL-PRF-19500. Polarity shall be as marked on figure 1.

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

3.7 Electrical test requirements. The electrical test requirements shall be the subgroups specified in 4.4.2 and 4.4.3.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

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).

4.2 Qualification inspection. Qualification inspection shall be in accordance with MIL-PRF-19500 and as specified herein.

4.3 Screening (JANTX and JANTXV levels). Screening shall be in accordance with table E-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.

4.3.1 Discrete diode screening. One hundred percent of the internal discrete diodes shall be subjected to the following inspections:

Screen	Measurement
3c (1)	Thermal impedance (see 4.5.6)
9	Not applicable
11	I_{R1} and V_{F1}
12	See 4.3.1.1
13	Subgroup 2 of table I herein. $\Delta V_{F1} = \pm 0.1$ V dc; $\Delta I_{R1} = 100$ percent of initial value or ± 250 nA dc, whichever is greater.

- (1) This test shall be performed any time after temperature cycling, screen 3a, and does not need to be repeated in screening requirements.

4.3.1.1 Power burn-in conditions. The power burn-in conditions shall be in accordance with test condition B of method 1038 of MIL-STD-750. The details of 4.5.1 and those that follows shall apply: T_A = room ambient as defined in the general requirements and mounting conditions of MIL-STD-750, V_{RWM} = rated V_{RWM} (see 1.3), $I_O = 3$ A dc minimum, $f = 50$ to 60 Hz.

4.3.2 Assembly screening. One-hundred percent of the completed bridge rectifier assemblies shall be subjected to the following inspections:

Screen	Measurement
Temperature cycling	Method 1051 of MIL-STD-750, condition F.
End-point electrical measurements (1)	Subgroup 2 of table I herein.
Dielectric withstanding voltage	See 4.5.2.

- (1) Except thermal impedance.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

4.4 Conformance inspection. Conformance inspection shall be performed on the completed bridge rectifier assemblies in accordance with MIL-PRF-19500 and as specified herein.

4.4.1 Group A inspection. Group A inspection shall be conducted in accordance with table E-V of 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 table E-VIB (JANTX, JANTXV) of MIL-PRF-19500 and as follows. Delta electrical measurements (end-points) shall be in accordance with the applicable steps of table II herein.

<u>Subgroup</u>	<u>Method</u>	<u>Conditions</u>
B2	1051	Condition F, 25 cycles.
B2	1071	Not applicable.
B3	1027	$I_O = 0$ A dc; $T_A = +150$ °C; $V_{RWM} = \text{rated } V_{RWM}$ (see 1.3), $f = 50$ to 60 Hz. Sampling plan $n = 10$, $c = 0$.
B3		Electrical measurements, see table I, subgroup 2 herein.
B5		Operational thermal cycling (see 4.5.7).
B5	3105	Junction temperature test (see 4.5.4).
B6		Not applicable.

4.4.3 Group C inspection. Group C inspection shall be conducted in accordance with the conditions specified for subgroup testing in table E-VII of MIL-PRF-19500 and as follows. Delta electrical measurements (end-points) shall be in accordance with the applicable steps of table II herein. Group C sample size may be modified, when applicable, per the subgroups below.

<u>Subgroup</u>	<u>Method</u>	<u>Conditions</u>
C2	1056	Not applicable.
C2	2036	Test condition A, 6 pounds (2.72 kg), $t = 30$ seconds.
C2	2036	Test condition D1, $t = 10$ seconds, 16 inch-ounces (0.11 n-m).
C2	1071	Not applicable.
C6	1026	$I_O = 0$ A dc; $T_A = 150$ °C; $V_{RWM} = \text{rated } V_{RWM}$ (see 1.3), $f = 50$ to 60 Hz, sampling plan $n = 10$, $c = 0$.
C6		Electrical measurements, see table I, subgroup 2 herein.
C8	1001	Pressure = 8 mm Hg (M19500/469-01 through 03); 33 mm Hg (M19500/469-04 and -05), $I_R = 2.0$ μ A dc maximum, $V_R = \text{rated } V_{RWM}$ (see 1.3), (applied between all terminals to the case); sampling plan $n = 12$, $c = 0$.
C8	4066	$V_{RWM} = 0$ V, bridge $I_O = 10$ A dc (entire bridge biased); $T_C = 55$ °C $+10$ °C, -0 °C; $I_{FSM} = 100$ A (pk) (each device for each bridge leg); $t_p = 8.3$ ms; ten surges for each leg at maximum 1 minute intervals; sampling plan $n = 22$, $c = 0$.

Alternate condition: Each leg may be biased separately to $I_O = 5$ A dc. All other conditions shall be the same as above.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

4.4.3.1 Sampling. The following allowances for small lot samples (samples from small inspection lots) shall only apply when the discrete diodes are screened to quality level JANTX or JANTXV requirements (see 6.7).

- a. Small lot samples may be used to satisfy the group C requirements for inspection lots of structurally identical devices.
- b. Small lot samples may be used to satisfy the 1-year group C interval as allowed for large lot samples in [MIL-PRF-19500](#).

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

4.5.1 Mounting conditions.

4.5.1.1 Default mounting conditions. The discrete diodes shall be suspended by the terminals with at least 6.0 inches (152.4 mm) of no. 22 or smaller wire between each terminal and the power source. The connecting wires may be soldered to the terminals or AS39029/57 contacts may be used. Other clips may be used provided they have equal or less mass than the AS39029/57 contact. No forced air shall be permitted and the discrete diodes shall be shielded from drafts.

4.5.1.2 Alternate mounting conditions. At the option of the manufacturer, other chip or heat sink mounting configurations may be utilized provided that I_o is adjusted such that the junction temperature of each discrete diode is maintained at least 120 °C above the specified ambient temperature of 25 °C.

4.5.2 Dielectric withstanding voltage. This test shall be performed in accordance with method 1081 of [MIL-STD-750](#). This test shall be performed with the metal case of the bridge rectifier assembly connected to ground and all four terminals connected to the high potential side of a dc power supply or a scope display test set. The voltage applied between the terminals and the case shall be 2,800 volts and shall be held at that level for 10 seconds. Any discontinuity or dynamic instability of the trace, or a breakdown current in excess of 10 μ A dc, shall be cause rejection.

4.5.3 Reverse-recovery time and trace. This test shall be performed in accordance with method 4031 of [MIL-STD-750](#) and [figure 2](#) herein.

4.5.4 Junction temperature test. The junction temperature test shall be performed in accordance with method 3105 of [MIL-STD-750](#) and [figures 3](#) and [4](#) herein. The maximum junction temperature for any diode in the bridge rectifier at the below specified conditions shall be 175 °C maximum. The test conditions shall be as follows:

- a. $T_c = 55\text{ °C}$, $I_o = 10\text{ A dc}$, $I_{ref} = 10\text{ mA dc}$ or
- b. $T_c = 100\text{ °C}$, $I_o = 6\text{ A dc}$, $I_{ref} = 10\text{ mA dc}$.

4.5.5 Scope display evaluation. The reverse characteristics shall be inspected and evaluated in accordance with method 4023 of [MIL-STD-750](#). The test conditions shall be as follows:

- a. Test condition B.
- b. Horizontal sensitivity: 50 to 200 V/division.
- c. Vertical sensitivity: 5 to 20 μ A/division.
- d. Reverse current over the knee: 50 μ A minimum.

Each device shall exhibit a sharp knee characteristic and any discontinuity or dynamic instability of the trace shall be cause for rejection.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

4.5.6 Thermal impedance. The thermal impedance measurement shall be performed in accordance with method 3101 of MIL-STD-750. The following parameters shall apply:

- a. Measurement current (I_M) 10 mA.
- b. Heating current (I_H) 3 A minimum.
- c. Heating time (t_H) 10 ms.
- d. Measurement time delay (t_{MD}) 70 μ s maximum.

The maximum limit for $Z_{\theta JX}$ under these test conditions is 1.5 °C/W.

4.5.7 Operational thermal cycling. This test shall be performed by connecting a three phase 50 to 60 Hz sine wave input of 10 to 20 volts rms to the ac terminals of the bridge rectifier. The resistive load shall be made variable in order to maintain a rated bridge output current of 10 amperes. The bridge rectifier case temperature shall be maintained at 55 °C except during the cooling cycle when case temperature shall be permitted to drop 20 °C maximum. Life-test duration shall be 2,000 cycles with a heating time of 8 minutes, +2, -0 minutes and a cooling time $\geq$ 2 minutes.

TABLE I. Group A inspection.

Inspection <u>1/</u>	MIL-STD-750		Symbol	Limit	Limit	Unit
	Method	Conditions		Min	Max	
<u>Subgroup 1</u>						
Visual and mechanical examination	2071					
<u>Subgroup 2</u>						
Thermal impedance	3101	See 4.5.6	$Z_{\theta JX}$		1.5	°C/W
Forward voltage <u>2/</u>	4011	Condition B; $t_p = 8.3$ ms maximum; duty cycle $\leq$ 2 percent ; $I_F = 15.7$ A (pk)	V_{F1}		1.35	V (pk)
Reverse current <u>2/</u>	4016	Condition A or B; $V_R =$ rated V_{RWM} (see 1.3)	I_{R1}		2	μ A dc
Breakdown voltage <u>2/</u>	4021	$I_R = 50$ μ A dc	$V_{(BR)1}$			
M19500/469-01				220		V dc
M19500/469-02				440		V dc
M19500/469-03				660		V dc
M19500/469-04				880		V dc
M19500/469-05				1,100		V dc

See footnotes at end of table.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

TABLE I. Group A inspection - Continued.

Inspection <u>1/</u>	MIL-STD-750		Symbol	Limit	Limit	Unit
	Method	Conditions		Min	Max	
<u>Subgroup 3</u>						
High temperature operation:		T _C = 100 °C				
Reverse current <u>2/</u>	4016	Condition A or B; V _R = rated V _{RWM} (see 1.3)	I _{R2}		125	µA dc
Low temperature operation:		T _A = -65 °C				
Forward voltage <u>2/</u>	4011	Condition B; t _p = 8.3 ms maximum, I _F = 15.7 A (pk);	V _{F2}		1.5	V (pk)
Breakdown voltage <u>2/</u>	4021	I _R = 50 µA dc	V _{(BR)2}			
M19500/469-01				200		V dc
M19500/469-02				400		V dc
M19500/469-03				600		V dc
M19500/469-04				800		V dc
M19500/469-05				1,000		V dc
<u>Subgroup 4</u>						
Dielectric withstanding voltage	1081	See 4.5.2				
Reverse recovery time <u>2/</u>	4031	Condition B1, I _F = 0.5 A, I _R = 1.0 A, I _{rec} = 0.25 A (see figure 2)	t _{rr}		2.5	µs
<u>Subgroups 5 and 6</u>						
Not applicable						
<u>Subgroup 7</u>						
Scope display evaluation	4023	See 4.5.5, sample size: 116 devices, c = 0				

1/ For sampling plan, see MIL-PRF-19500.

2/ Applies to each discrete diode and each bridge rectifier leg.

MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

TABLE II. Groups B and C electrical measurements. 1/ 2/

Step	Inspection	MIL-STD-750		Symbol	Limit	Limit	Unit
		Method	Conditions		Min	Max	
1.	Forward voltage	4011	Condition B; $t_p = 8.3$ ms maximum; duty cycle ≤ 2 percent maximum; $I_F = 15.7$ A dc	ΔV_{F1}	± 0.1		V dc
2.	Reverse current	4016	Condition A or B; $V_R =$ rated V_{RWM} (see 1.3)	ΔI_{R1}	100 percent of initial value or ± 250 nA dc, whichever is greater.		

- 1/ The delta electrical measurements for group B inspection (table E-VIB of MIL-PRF-19500) are as follows:
- In addition to the measurements specified for subgroup 2, the measurements of steps 1 and 2 of this table shall also be taken.
 - In addition to the measurements specified for subgroup 3, the measurements of steps 1 and 2 of this table shall also be taken.
 - In addition to the measurements specified for subgroup 5, the measurements of steps 1 and 2 of this table shall also be taken.
- 2/ The delta electrical measurements for group C inspection (table E-VII of MIL-PRF-19500) are as follows:
- In addition to the measurements specified for subgroup 2, the measurements of steps 1 and 2 of this table shall also be taken.
 - In addition to the measurements specified for subgroup 6, the measurements of steps 1 and 2 of this table shall also be taken.

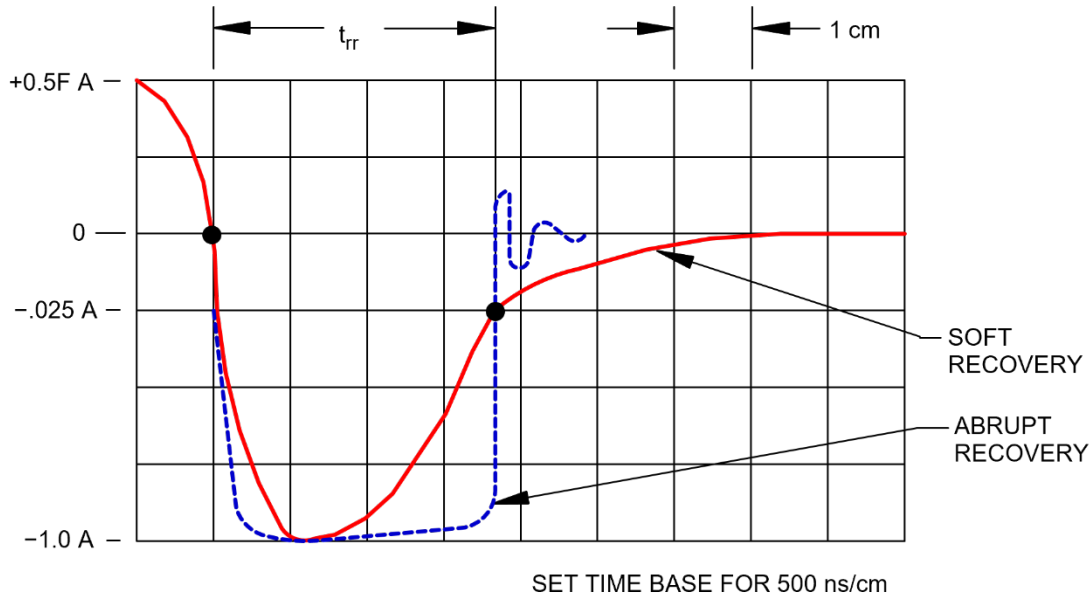
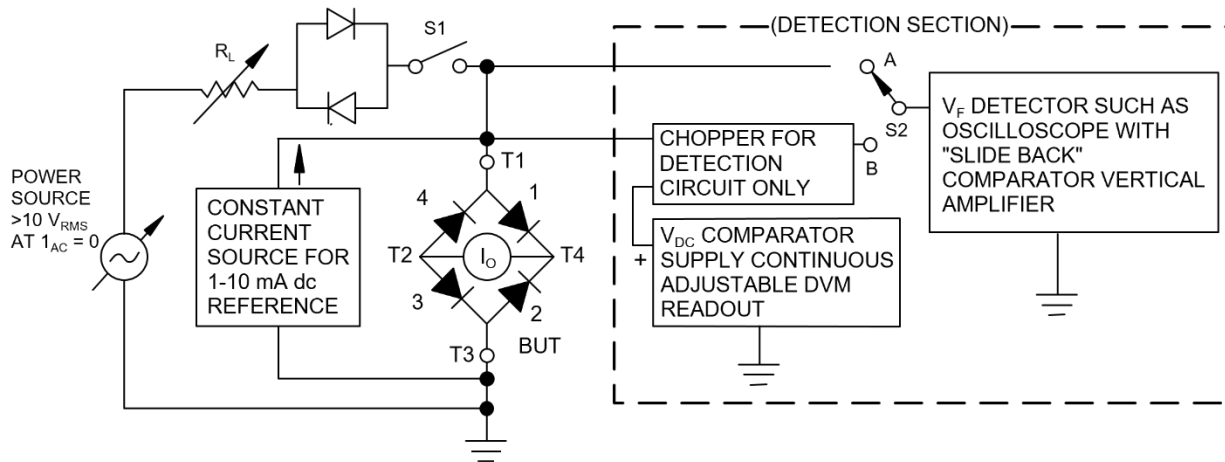


FIGURE 2. Reverse recovery characteristic waveform.

Purpose: To verify that $T_J \leq +175^\circ\text{C}$ at maximum rated current and specified case temperature.

Test circuit:

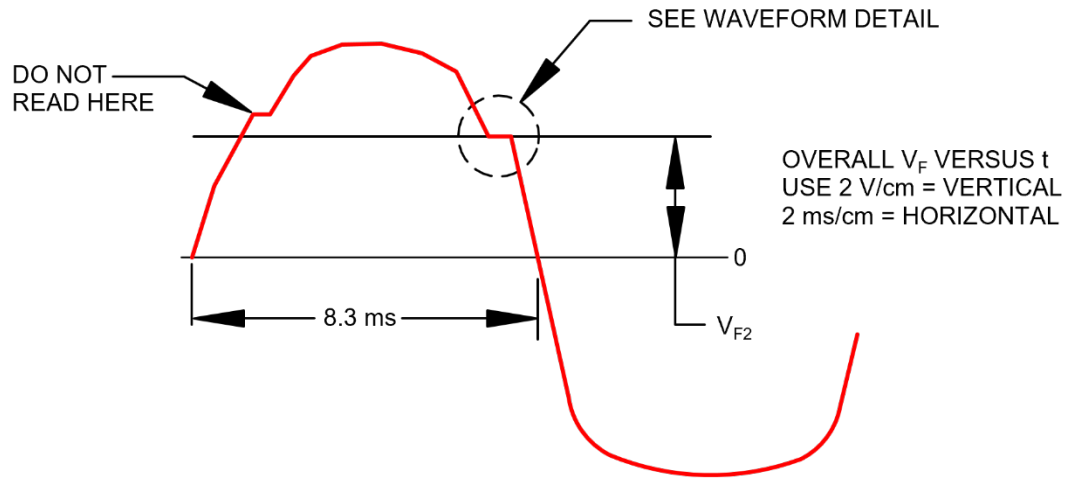


Procedure:

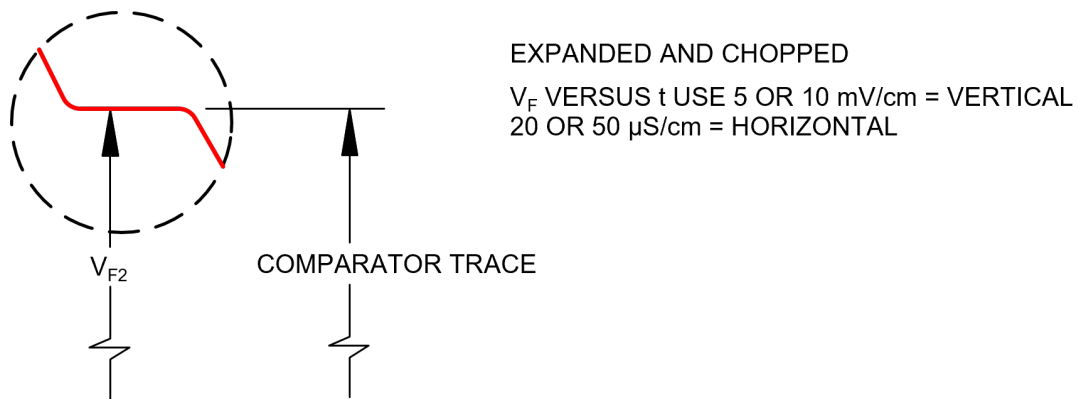
- With S1 open and bridge under test (BUT) at $+175^\circ\text{C}$, read V_{F1} at reference current.
- With device held at a case temperature, close S1 and adjust power source and R_L for maximum rated $I_{O(av)}$. Establish thermal equilibrium.
- Observe V_{F2} in accordance with figure 4 using the same reference current (± 1 percent) as in step a.
- With S2 "up" (position A), locate the correct position for reading V_{F2} (see figure 4).
- With S2 "down" (position B), adjust comparator supply to line up V_{F2} with comparator trace (see waveform detail of figure 4).
- Read V_{F2} on digital voltmeter.

Acceptance criterion: V_{F2} shall be $\geq V_{F1}$. (Indicated $T_J \leq +175^\circ\text{C}$).

FIGURE 3. Junction temperature test circuit and procedure for bridge rectifier.



Waveform



Waveform detail

FIGURE 4. Junction temperature waveform and waveform details.

5. PACKAGING

5.1 Packaging. For acquisition purposes, the packaging requirements shall be as specified in the contract or order (see 6.2). When packaging of materiel is to be performed by DoD or in-house contractor personnel, these personnel need to contact the responsible packaging activity to ascertain packaging requirements. Packaging requirements are maintained by the Inventory Control Point's packaging activities within the Military Service or Defense Agency, or within the Military Service's system commands. Packaging data retrieval is available from the managing Military Department's 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. The notes specified in MIL-PRF-19500 are applicable to this specification.)

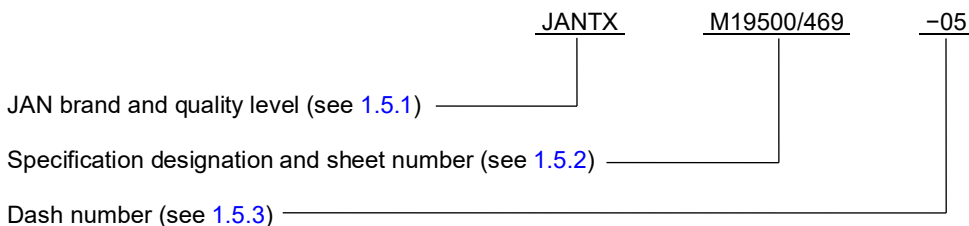
6.1 Intended use. Semiconductors conforming to this specification are intended for original equipment design applications and logistic support of existing equipment.

6.2 Acquisition requirements. Acquisition documents should specify the following:

- a. Title, number, and date of this specification.
- b. Packaging requirements (see 5.1).
- c. Terminal finish (see 3.4.2).
- d. The complete PIN, see 1.5 and 6.4.
- e. Destructive physical analysis when requested.

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 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 orders for the products covered by this specification. Information pertaining to qualification of products may be obtained from DLA Weapons Support Land and Maritime, ATTN: VQE, P.O. Box 3990, Columbus, OH 43218-3990 or e-mail vqe.chief@dla.mil. An online listing of products qualified to this specification may be found in the Qualified Products Database (QPD) at <https://qpldocs.dla.mil>.

6.4 PIN construction example. The PINs are constructed using the following form.



MIL-PRF-19500/469F
w/AMENDMENT 2
DRAFT DATE: 27 AUGUST 2026

6.5 List of PINs. The following is a list of all possible PINs for the devices available on this specification sheet.

Quality level TX	Quality level TXV
JANTXM19500/469-01	JANTXVM19500/469-01
JANTXM19500/469-02	JANTXVM19500/469-02
JANTXM19500/469-03	JANTXVM19500/469-03
JANTXM19500/469-04	JANTXVM19500/469-04
JANTXM19500/469-05	JANTXVM19500/469-05

6.6 Interchangeability data. JANTX devices are one-way interchangeable for JAN devices (example: JXM19500/469-01 for JM19500/469-01). JAN devices are no longer procurable under this specification. Existing stock of JAN level devices may be used until exhausted.

6.7 Group C sampling modification. The use of samples from small inspection lots (small lot samples) for group C inspection is allowed in this specification sheet because of the unique design and construction of the end item rectifier bridge that consists of multiple screened non-cavity discrete diodes which are assembled and then encapsulated.

6.8 Amendment notations. The margins of this specification are marked with vertical lines to indicate modifications generated by this amendment. 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.

CONCLUDING MATERIAL

Custodians:

Army – CR
Navy – SH
Air Force – 85
NASA – NA
DLA – CC

Preparing activity:
DLA – CC

(Project 5961-2026-081)

Review activities:

Army – AR
Navy – AS, MC
Air Force – 19

NOTE: The activities listed above were interested in this document as of the date of this document. Since organizations and responsibilities can change, you should verify the currency of the information above using the ASSIST Online database at <https://assist.dla.mil>.