

The documentation and process conversion measures necessary to comply with this document shall be completed by 29 October 2019.

INCH-POUND

MIL-PRF-19500/469F
 29 June 2019
 SUPERSEDING
 MIL-PRF-19500/469E
 9 May 2014

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, $T_A = +25^\circ\text{C}$.

1.3.1 Ratings applicable to all Part or Identifying Numbers (PIN). Operating temperature: -65°C to $+150^\circ\text{C}$. Storage ambient temperature: -65°C to $+150^\circ\text{C}$.

1.3.2 Ratings applicable to individual types.

Types	V_{RWM}	Bridge (1) I_{O1} at $T_C = +55^\circ\text{C}$	Bridge (2) I_{O2} at $T_C = +100^\circ\text{C}$	I_F (surge) $I_O = 10$ A dc $T_C = +55^\circ\text{C}$ $t_p = 8.3$ ms	Barometric pressure reduced	t_{rr} $I_F = 0.5$ A $I_R = 1.0$ A $I_{rec} = 0.25$ A
M19500/469-	<u>V (pk)</u>	<u>A dc</u>	<u>A dc</u>	<u>A (pk)</u>	<u>mm Hg</u>	<u>μs</u>
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 $T_C = +55^\circ\text{C}$ to 6 A dc at $+100^\circ\text{C}$ (88 mA dc/ $^\circ\text{C}$).
- (2) Derate from 6 A dc at $T_C = +100^\circ\text{C}$ to 0 A dc at $+150^\circ\text{C}$ (120 mA dc/ $^\circ\text{C}$).

Comments, suggestions, or questions on this document should be addressed to DLA 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

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