

The documentation and process conversion measures necessary to comply with this document shall be completed by 28 October 2019.

INCH-POUND

MIL-PRF-19500/483E
 28 June 2019
 SUPERSEDING
 MIL-PRF-19500/483D
 w/Amendment 1
 22 February 2013

PERFORMANCE SPECIFICATION SHEET

RECTIFIER, SEMICONDUCTOR DEVICE, UNITIZED, SILICON, HIGH-POWER,
 THREE PHASE, FULL WAVE BRIDGE RECTIFIER,
 TYPES M19500/483-01 THROUGH M19500/483-04,
 QUALITY LEVEL JANTX

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, 3-phase, full wave bridge rectifiers intended for use in applications at frequencies of 1 kHz or less. One level of product assurance (JANTX) is 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). Junction temperature: -65°C to $+175^\circ\text{C}$. Storage ambient temperature: -65°C to $+150^\circ\text{C}$.

1.3.2 Ratings applicable to individual types.

Types	V_{RWM}	Bridge (1)	Bridge (2)	$I_{F(surge)}$	Barometric pressure (reduced)	t_{rr}
		I_{O1} at $T_C = +55^\circ\text{C}$	I_{O2} at $T_C = +100^\circ\text{C}$	$I_O = I_{O1}$ $T_C = +55^\circ\text{C}$ $t_p = 8.3$ ms		
M19500/483-	V (pk)	A dc	A dc	A (pk)	mmHg	μs
01	200	25	18.5	150	8	2.5
02	400	25	18.5	150	8	2.5
03	600	25	18.5	150	33	2.5
04	800	25	18.5	150	33	2.5

- (1) Derate from 25 A dc at $T_C = +55^\circ\text{C}$ to 18.5 A dc at $T_C = +100^\circ\text{C}$ (144 mA dc/ $^\circ\text{C}$).
- (2) Derate from 18.5 A dc at $T_C = +100^\circ\text{C}$ to 0 A dc at $T_C = +150^\circ\text{C}$ (370 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

