



DEFENSE LOGISTICS AGENCY
LAND AND MARITIME
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13 June 2024

MEMORANDUM FOR MILITARY/INDUSTRY DISTRIBUTION

SUBJECT: Engineering Practice Study to Determine which Fixed, Wirewound (Accurate) (Style RBR) Resistor Specifications to Standardize on. Project Number 5905-2024-005.

It is requested that your office take the necessary action to reflect completion of the subject document dated, 13 June 2024, and is now available for viewing and downloading from the DLA Land and Maritime website:

<https://LandandMaritimeApps.dla.mil/Programs/MilSpec/DocSearch.aspx>

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/signed/
Michael Radecki
Chief
Electronic Component Branch



ENGINEERING PRACTICES STUDY

TITLE: TO SURVEY MILITARY AND INDUSTRY ON DETERMINING THE
APPROPRIATE MILITARY SPECIFICATIONS AND/OR DLA LAND AND MARITIME
DRAWINGS THAT SHOULD BE USED FOR MIL-PRF-39005.

13 June 2024

STUDY PROJECT (SEE ATTACHMENT 1)

FINAL

Study Conducted by DLA LAND AND MARITIME

Prepared by:

Andrew Ernst

I. **OBJECTIVES:** DLA Land and Maritime-VAT conducted a survey to determine which fixed, wirewound (accurate) military specification and/or DLA Land and Maritime drawings to standardize on for MIL-PRF-39005 which has no source of supply. The purpose of this survey was to obtain input from the military services, and user communities to determine which of specification/drawings best meets their needs.

II. **BACKGROUND:** In September 2013 IRC/TT Electronics informed DLA that they were dropping off the QPL for MIL-PRF-39005 & -93. They had been the sole source for these specifications since November 2002. In July 2014 Pacific Resistor joined IRC/TT Electronics as a supplier to MIL-R-93, and by February 2016 Pacific Resistor was the sole source and still is. Also in 2013, Ohmite Manufacturing was solicited to become a supplier to the MIL-PRF-39005 specification, which they agreed, and with the approval of the CE-11 (formerly G-11) committee DLA drawings would be developed on the parts Ohmite would use for qualification, thus making an easier form, fit and function changeover for the OEMs once the Ohmite parts were qualified.

In October 2023 Ohmite informed DLA that they are no longer seeking qualification to MIL-PRF-39005, and with no source of supply the specification will need to be inactivated. The question is which way does FSC 5905 community want to standardize on these parts?

The specifications MIL-PRF-39005 has no source of supply, MIL-PRF-93 is inactive for new design and could be reactivated and the DLA Land and Maritime drawings which are the active documents today, see table below.

The specifications and drawings do offer a difference in testing:

MIL-PRF-39005 (Established reliability) has Qualification, Group A, B & C (10,000 hours Life test) testing.

MIL-PRF-93 (non-established reliability) has Qualification, Group A & B (2,000 hours Life test in qual only) testing.

DLA Land and Maritime drawings – Group A & B (MIL-PRF-39005 testing reference - no Life test) testing.

MIL-PRF-39005	Style	QPL source	MIL-PRF-93	Style	QPL source	DLA Drawing	Vendor source
/1	RBR52	n/a	/10 (inactive)	RB52	Pacific Resistor	14006	Ohmite
/2	RBR53	n/a	/11 (inactive)	RB53	Pacific Resistor	15002	Ohmite
/3	RBR54	n/a	/12 (inactive)	RB54	Pacific Resistor	14007	Ohmite
/4	RBR55	n/a	/13 (inactive)	RB55	Pacific Resistor	15003	Ohmite
/5	RBR56	n/a	/14 (inactive)	RB56	Pacific Resistor	14008	Ohmite
/6	RBR71	n/a	/20 (inactive)	RB71	PR is not qualified (they do make the part)	15004	Ohmite
/7 (inactive)	RBR57	n/a	/16 (cancel)	RB57	n/a	n/a	n/a
/9 (inactive)	RBR75	n/a	n/a	n/a	n/a	16001	Ohmite
/11	RBR80	n/a	n/a	n/a	n/a	15007	Ohmite
/11	RBR81	n/a	n/a	n/a	n/a	09008 1/	Ohmite
			/4 (cancel)	RB17	n/a	15006	Pacific Resistor
			/15 (cancel)	RB08	n/a	16002	Pacific Resistor

Proposal. DLA Land and Maritime asked that the above table be reviewed, and the MIL-PRF-39005 community determine what is needed to support this specification.

III. **RESULTS:** The study was brought to SAE CE-11 committee for their views and comments. The committee assigned TASK 24-102 for a working group to come together and determine the best way to support this specification. The working group met (29 April 2024) and determined that since the Department of State has a travel restriction on the Matamoros, Mexico area, and that Ohmite Manufacturing only produces the MIL-PRF-39005 type resistor in their Matamoros facility, that it would be best that the DLA Land and Maritime drawings be used as the controlling documents. The travel restriction has been on the Matamoros area since the conception of the DLA Land and Maritime drawings (2014).

For the specification MIL-PRF-39005, it will be inactivated for new design with replacement to the DLA Land and Maritime drawings (see table above). The drawings themselves will be updated to include an Approval inspection (similar to a qualification inspection) and a group C inspection which would include a life test.

1/ DLA Land and Maritime drawing 09008 (RBR81) has lost its source of supply. Ohmite informed DLA that they no longer make the part.

IV. CONCLUSIONS: MIL-PRF-39005 (RBR resistors) will be inactivated for new design, and DLA Land and Maritime drawings will be updated to include an approval inspection and a group C inspection. The different testing levels will be determined with a code letter in the part number.

V. RECOMMENDATIONS: DLA Land and Maritime recommends that all military and industry representatives review this survey.