



DEFENSE LOGISTICS AGENCY
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DLA Land and Maritime-VAT

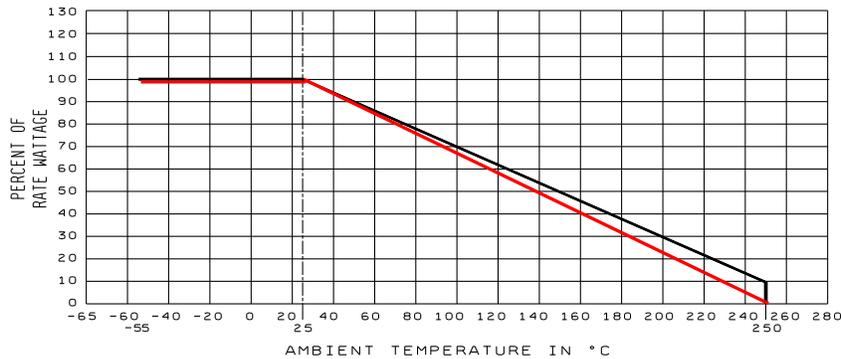
October 29, 2014

Military/Industry

Re: The derating curve of MIL-PRF-39007 and -39009.

Dear Recipients':

During the last two G-11 committee meeting (May & September 2014) it has been brought up that DLA has received a request to change the present derating curve (figure 1 of MIL-PRF-39007 and -39009) shown in black below to a new derating curve shown in red. The committee asked DLA to send out a survey with some history and justification on why the curve needs to change.



The present derating curve (in black) was changed in December 93 - MIL-PRF-39007G - amd 2, and January 94 - MIL-PRF-39009C - amd 1 from 100% rated wattage at 25°C to 0% at 275°C. Vishay Dale had requested the change in the derating curve to the new proposed curve (in red); this was due to a material change that could not meet the 275°C temperature. A survey of military and industry was taken regarding this request. The survey resulted that the change to 0 percent power at ambient temperature of 250°C was fine, but there were concerns that some circuits would exceed the new curve mid-level power rating, and there would be a cost for the user in reworking their calculation for the middle ranges. As a result it was agree that the curve would drop at the 10 percent power to 0 percent power at 250°C.

The Aerospace Corporation, Ms. Siplon requested changing the curve so the end point of the curve would be 0% power at 250°C. The rationale for this request is because the MIL spec high temperature exposure test at 250°C is run at zero power. No data is being generated to show that the parts will withstand 10% of rated power at 250°C as reflected in the black line of the derating curve above. Designers can mistakenly assume a part capability that is unsupported by test data. Vishay Dale was approach on this change to which they agreed.

Would this change affect your designs today? Would you support this change?

If this survey is of interest to you, please provide your comments to the project engineer electronically. It is very important that you attempt to respond electronically to this survey. This can be in the form of a return e-mail, with or without an attached text file. Because we believe electronic coordination should be faster than hard copy distribution, we have allotted a 45-day coordination cycle from the date of this letter. Please provide your comments within that time period. After the 45-day cycle is completed, a **“no response” will be noted as concurrence**. If an electronic response is not possible we will still accept comments via letter, facsimile or phone call but only after you have contacted the project officer listed below.

If there are any questions, please contact Andrew Ernst by the preferred method of electronic mail at andrew.ernst@dla.mil by telephone at commercial 614-692-0552, DSN 850-0552; or by facsimile at 614-692-6939. Our mailing address as a last resort is DLA Land and Maritime, ATTN: VAT, P.O. Box 3990, Columbus, OH 43218-3990. If you have further questions or concerns you may contact me at Michael.radecki@dla.mil, by telephone at 614-692-0561.

SIGNED

Michael A. Radecki
Chief
Electronic Components Team