

## Standard hybrid DC-DC converter derating for baseplate temperature

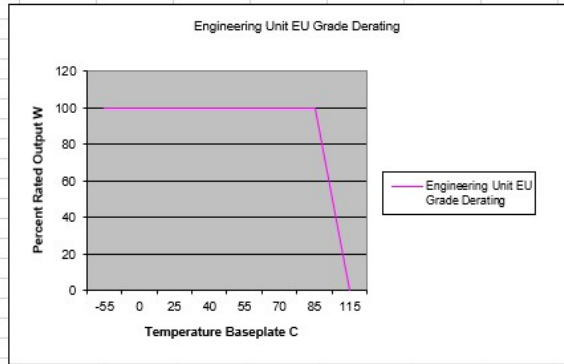
MDI standard hybrid DC-DC converters are designed, manufactured and tested for continuous operation at one hundred percent (100%) of published power rating up to their respective grade level maximum operating baseplate temperature. This is achieved by derating their internal components, elements and materials for thermal, electrical and environmental stresses during engineering design as described throughout these application notes. Power derating versus baseplate temperature by grade level illustrations follow for reference.

### EU Grade:

Temperature Baseplate C	Rated Output W
-55	100
0	100
25	100
40	100
55	100
70	100
85	100
115	0

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Power Derating vs. Temperature - Engineering Unit EU Grade

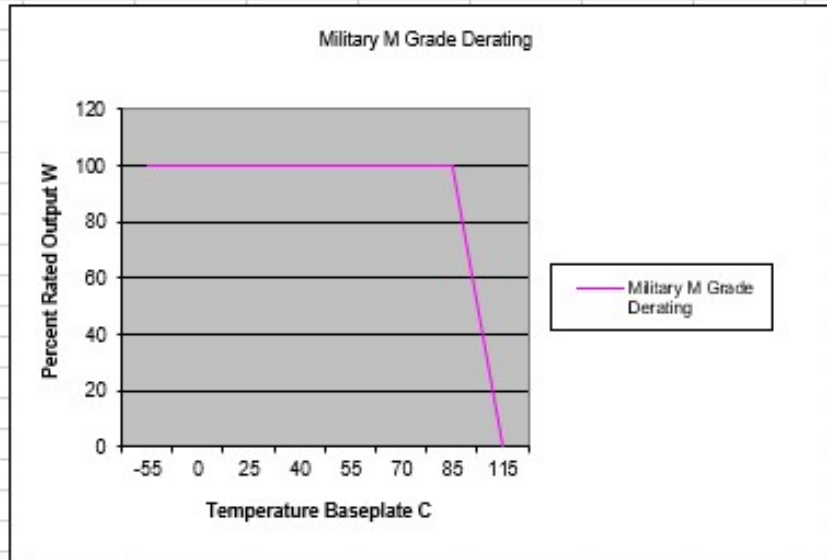


M Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
40	100
55	100
70	100
85	100
115	0

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Power Derating vs. Temperature - Military M Grade

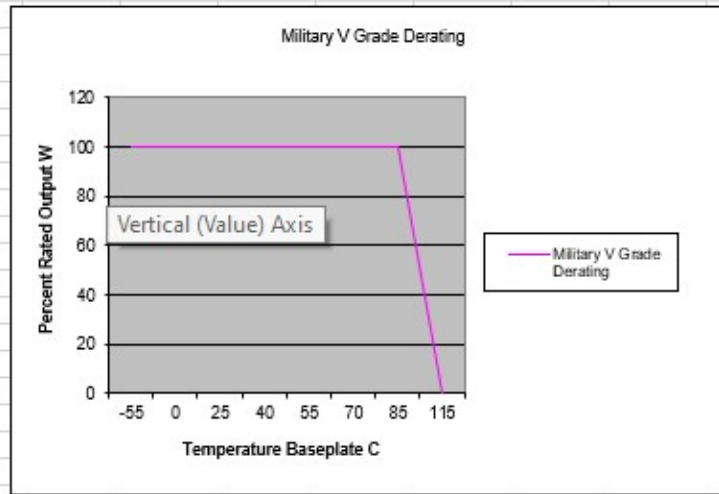


V Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
40	100
55	100
70	100
85	100
115	0

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Power Derating vs. Temperature - Military V Grade

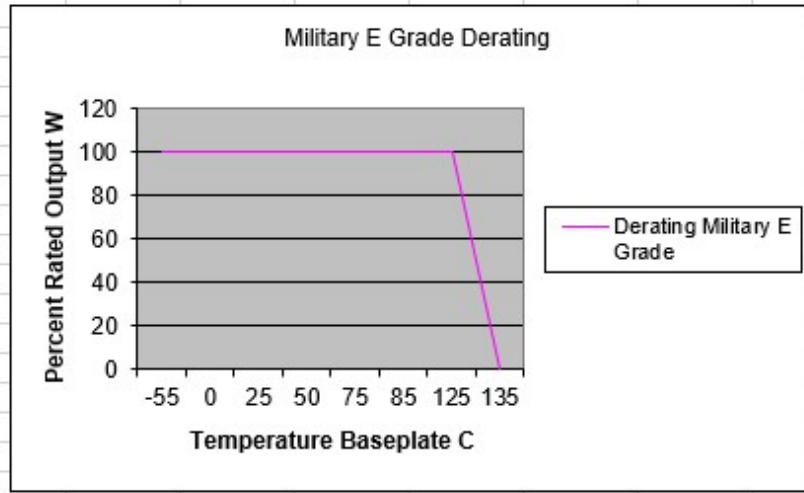


E Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
50	100
75	100
85	100
125	100
135	0

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Power Derating vs. Temperature - Military E Grade

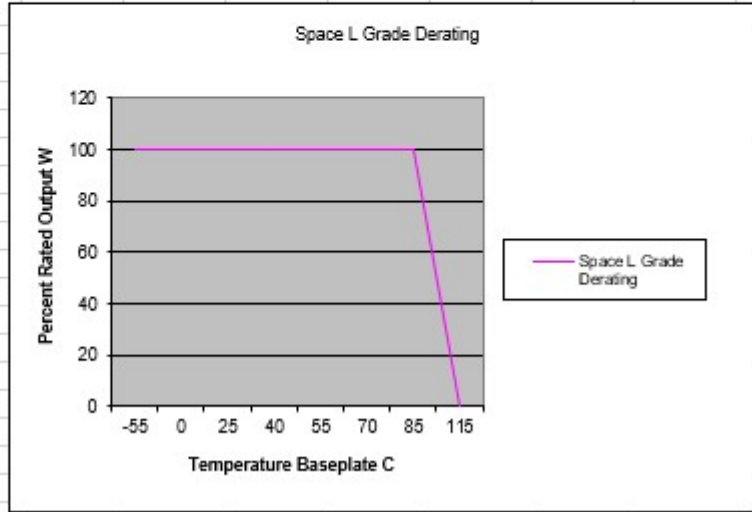


L Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
40	100
55	100
70	100
85	100
115	0

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Power Derating vs. Temperature - Space L Grade

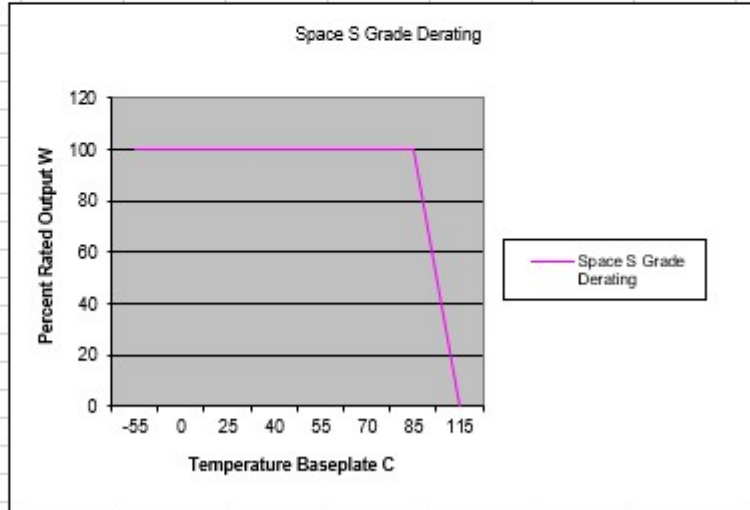


### S Grade:

Temperture Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
40	100
55	100
70	100
85	100
115	0

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### Power Derating vs. Temperature - Space S Grade



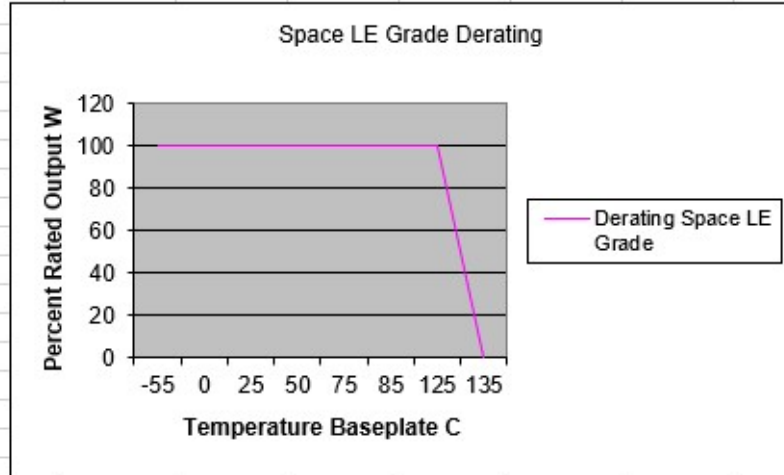
LE Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
50	100
75	100
85	100
125	100
135	0

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Power Derating vs. Temperature - Space LE Grade

Chart Area



SE Grade:

Temperature Baseplate C	Percent Rated Output W
-55	100
0	100
25	100
50	100
75	100
85	100
125	100
135	0

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Power Derating vs. Temperature - Space SE Grade

