



Template No.
CEMILAC_SYSGP_DD_05

**DERATING DOCUMENT
of<LRU/SYSTEM Name>
for
<Platform Name>**

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Sl.no.	Description	Part No.	Ckt Symbol	Rated Operating Temp.	Stress Parameter	Rated Stress	Applied Stress	Derating factor	Remarks

Description : Type of the component (Bus IC, SIP resistor, Tantalum capacitor etc)

Part no. : Manufacturer's part number of the component

Ckt Symbol : Symbol for the component in the schematics (U1, Q4, R27, C5 etc)

Rated Operating temperature : As per the data sheet. Usually for MIL components it is -55°C to +125°C, for industrial components, -40°C to +85°C.

Stress parameter : The parameter which is being derated. For ex., for resistors stress parameter is wattage, for transistor it is V_{CE0} , for ICs it is fan out, etc.

Rated stress : The rating of the stress parameter as per the data sheet of the component. For ex., resistor wattage rating can be 250 mW or 1 W etc.

Applied Stress : Maximum stress the component experiences as per the circuit design.

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Derating factor: The ratio of applied stress to rated stress. For ex., if the rated stress is 40V and the drop across the component as per the circuit design is maximum of 5V, derating for the component is 0.125 (12.5%). It is advisable not to exceed derating of 50% for components used in the airborne equipments. If derating is more than 0.5, justification may be provided.

Remarks : Any other relevant information

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