

Connector Technical Data

DERATING CURVES

The derating curve indicates the maximum current that can permanently and simultaneously flow through all connections if the component is exposed to ambient temperatures below its upper limit temperature.

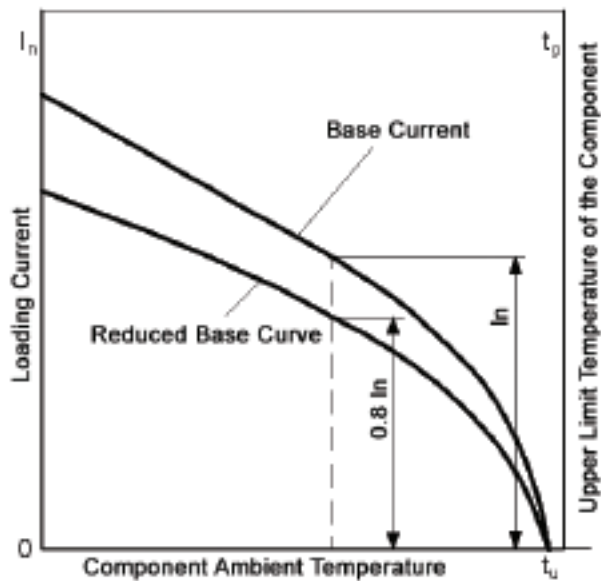
The upper limit temperature of a component is determined by the materials. The maximum temperature is calculated from the ambient temperature and from heating due to current loading,

it must not exceed the upper limit temperature of the component. The derating of a component is not a constant value, but decreases hand-in-hand with the increase in component ambient temperature.

Furthermore, current loading capacity is dependent upon geometry, the materials employed, the number of poles and conductor.

Since it is not advisable to use Heavy Duty connectors at their loading limits, the base curve is reduced. If the loading currents are reduced to 80%, then this produces the reduced base curve in relation to the various connectors and measurement uncertainties at which temperature measurements are taken into account. Experience shows that use of the reduced base curve data will provide operation over the widest range of connector applications.

Note: Only the reduced base curve is reproduced on the following derating curves for inserts.



CABLE OUTER DIAMETERS FOR PG

PG SIZE	CABLE O.D.: MINIMUM TO MAXIMUM	
7	0.157" - 0.236"	4 - 6 mm
9	0.157" - 0.433"	4 - 11 mm
11	0.256" - 0.531"	6.5 - 13.49 mm
13.5	0.256" - 0.531"	6.5 - 13.49 mm
16	0.256" - 0.630"	6.5 - 16 mm
21	0.354" - 0.787"	9 - 20 mm
29	0.669" - 1.102"	17 - 28 mm
36	0.906" - 1.339"	23 - 34 mm
42	1.142" - 1.575"	29 - 40 mm