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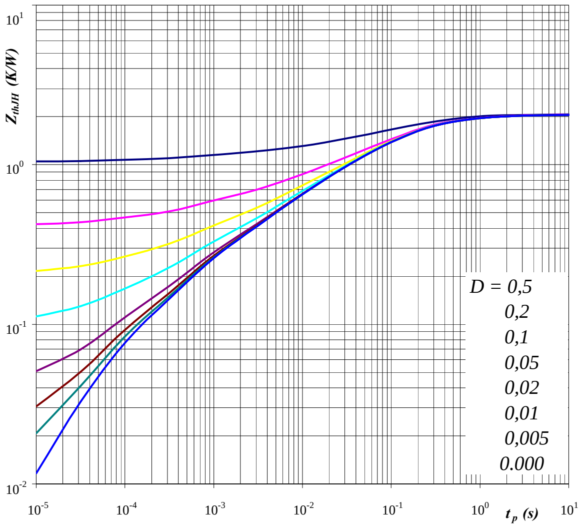
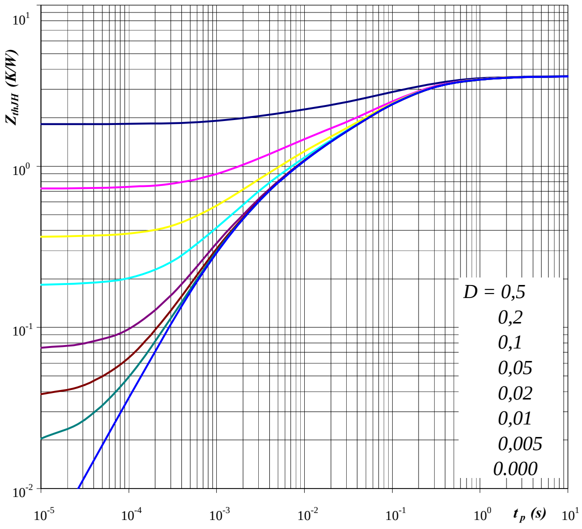
Figure 27. IGBT transient thermal impedance as a function of pulse width
$Z_{thJH} = f(tp)$



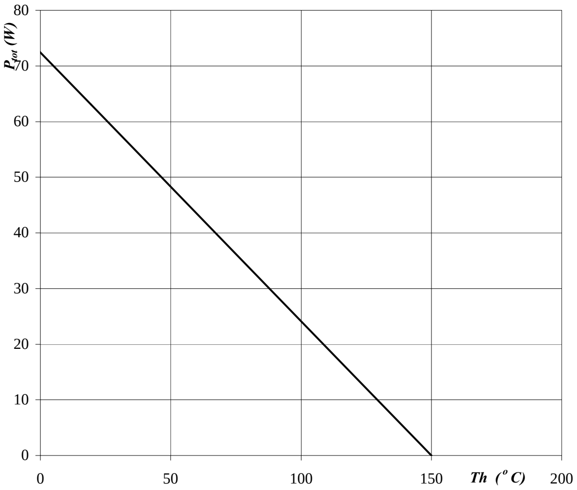
Parameter: D = tp / T   RthJH= 2,07 K/W

Figure 28. FRED transient thermal impedance as a function of pulse width
$Z_{thJH} = f(tp)$



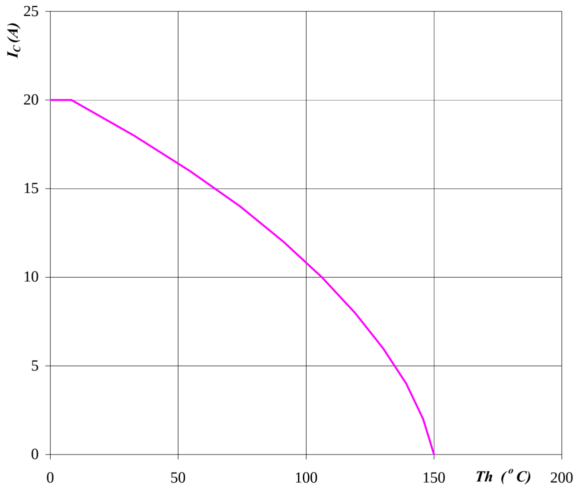
Parameter: D = tp / T   RthJH= 3,62 K/W

Figure 29. Power dissipation as a function of heatsink temperature
Brake IGBT
$P_{tot} = f(Th)$



parameter: Tj = 150°C

Figure 30. Collector current as a function of heatsink temperature
Brake IGBT
$I_c = f(Th)$



parameter: Tj = 150°C
V_{GE}= 15 V

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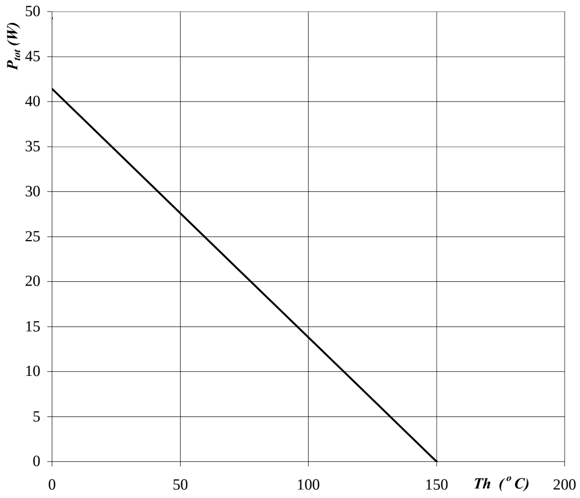
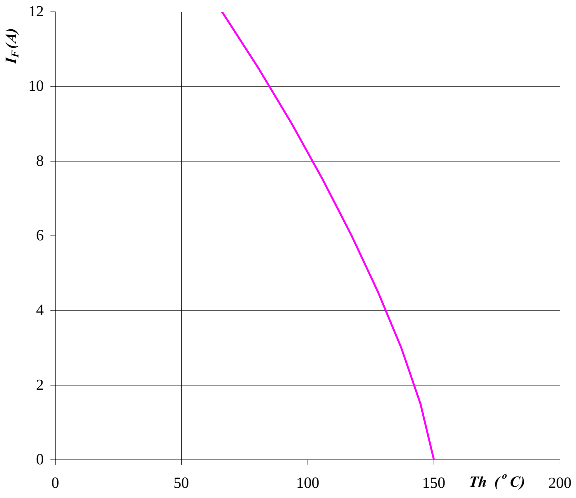
Figure 31. Power dissipation as a function of heatsink temperature
Brake FRED
$P_{tot} = f(Th)$



parameter: Tj = 150°C

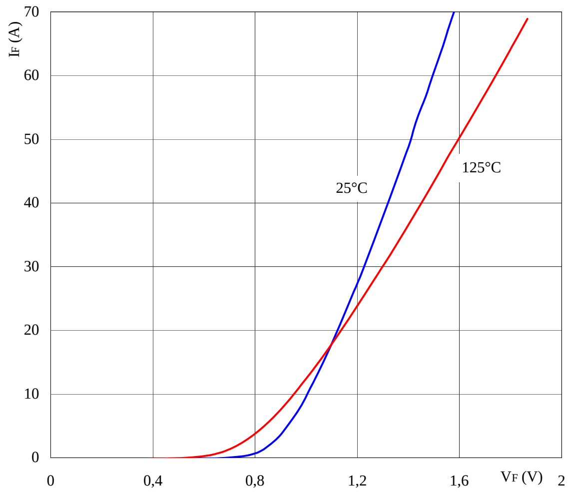
Figure 32. Forward current as a function of heatsink temperature
Brake FRED
$I_F = f(Th)$



parameter: Tj = 150°C

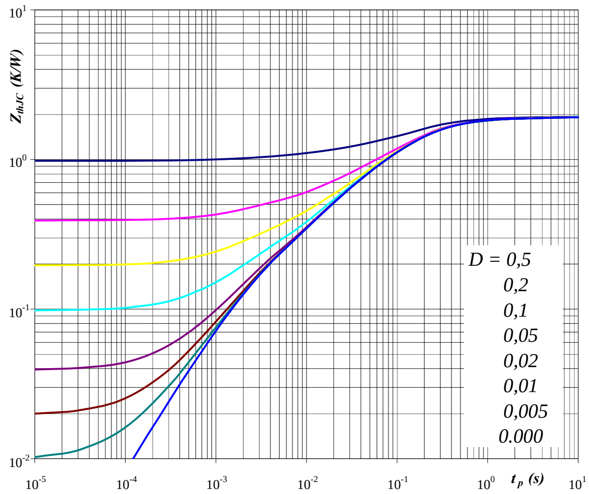
Input rectifier bridge

Figure 33. Typical diode forward current as a function of forward voltage
Rectifier diode $I_F=f(V_F)$



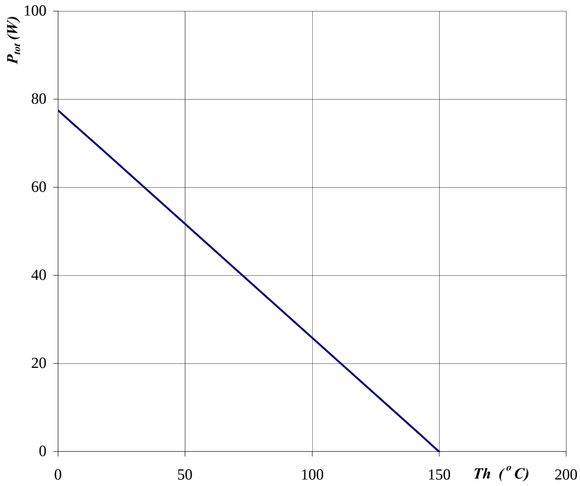
parameter: tp = 250 us

Figure 34. Diode transient thermal impedance as a function of pulse width
$Z_{thJH} = f(t_p)$



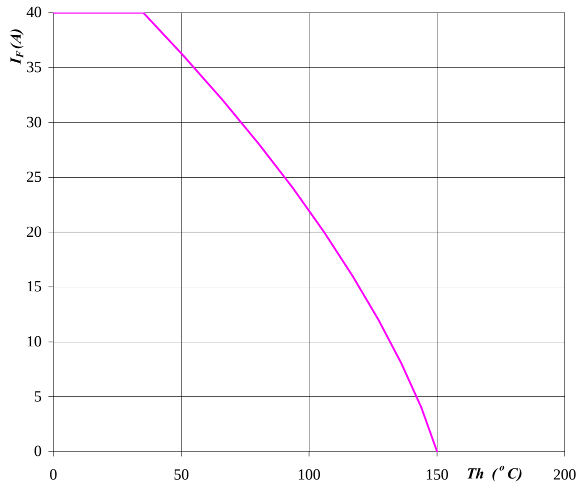
Parameter: D = tp / T RthJH= 1,94 K/W

Figure 35. Power dissipation as a function of heatsink temperature
Rectifier diode
$P_{tot} = f(T_h)$



parameter: Tj = 150°C

Figure 36. Forward current as a function of heatsink temperature
Rectifier diode
$I_F = f(T_h)$



parameter: Tj = 150°C

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Thermistor

Figure 37. Typical NTC characteristic as afunction of temperature

$R_T = f(T)$