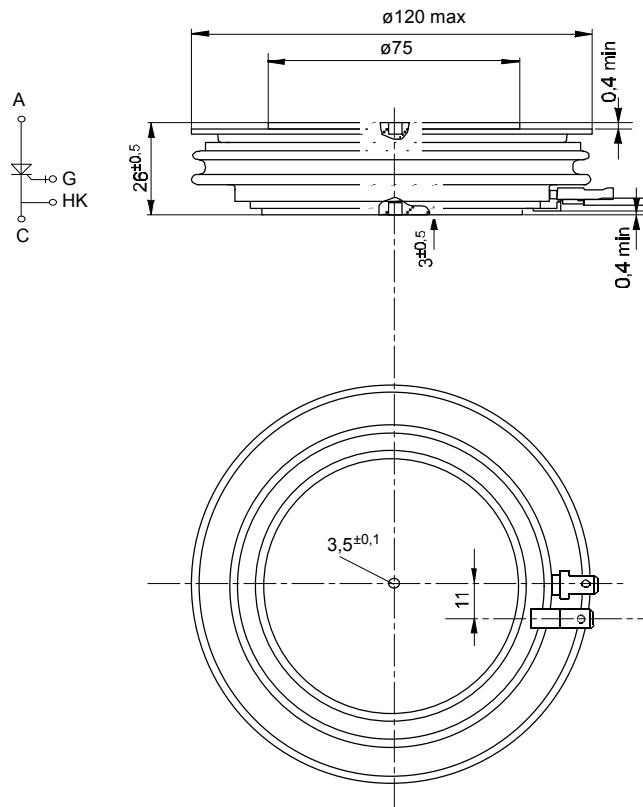


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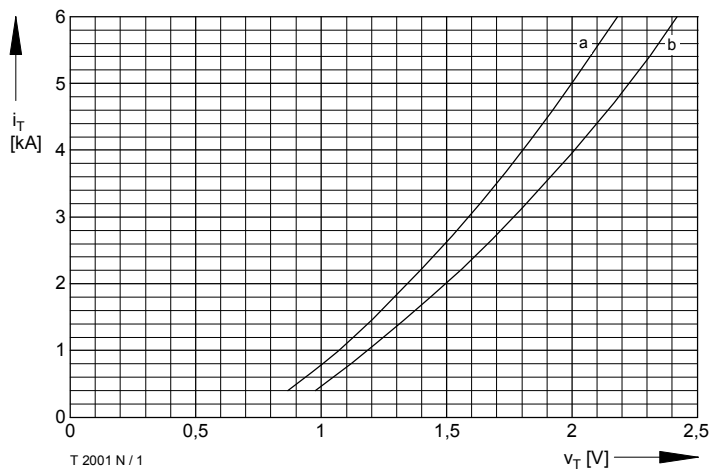


Bild / Fig. 1
Durchlaßkennlinien / On-state characteristics $i_T = f(v_T)$
a - Typische Kennlinien / Typical characteristics
b - Grenzkennlinien / Limiting characteristics

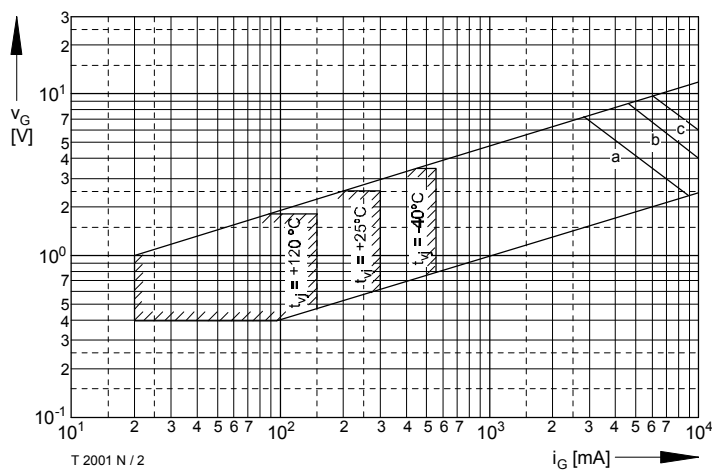


Bild / Fig. 2
Steuercharakteristik mit Zündbereichen / Gate characteristic with triggering areas $v_G = f(i_G)$, $V_D = 6\text{ V}$
Parameter:
Steuerimpulsdauer / Puls duration t_b [ms] a b c
Höchstzulässige Spitzensteuerleistung / Maximum allowable peak gate power [W] 20 40 60

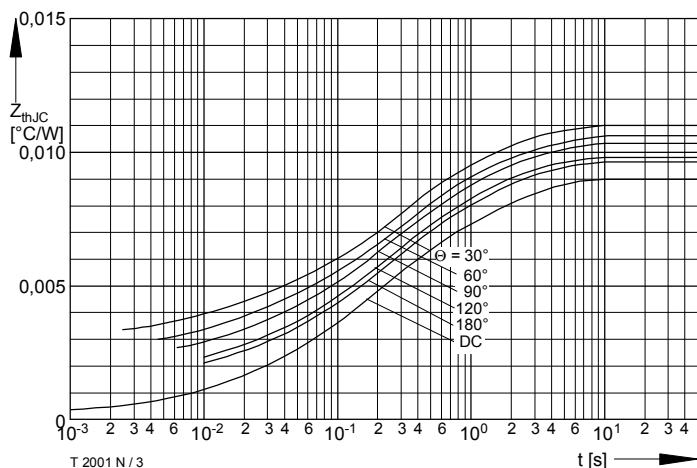


Bild / Fig. 3
Transienter innerer Wärmewiderstand / Transient thermal impedance $Z_{thJC} = f(t)$
Beidseitige Kühlung / Two-sided cooling
Parameter: Stromflußwinkel / Current conduction angle θ

Analytische Elemente des transienten Wärmewiderstandes Z_{thJC} pro Zweig für DC
Analytical elements of transient thermal impedance Z_{thJC} per arm for DC

Pos. n	1	2	3	4	5	Σ
$R_{thn} [^{\circ}\text{C/W}]$	0,00237	0,004	0,0017	0,0008	0,00013	0,009
$\tau_n [\text{s}]$	2,16	0,27	0,056	0,0068	0,0017	

Analytische Funktion / Analytical function:

$$Z_{thJC} = \sum_{n=1}^{n_{max}} R_{thn} (1 - e^{-\frac{t}{\tau_n}})$$

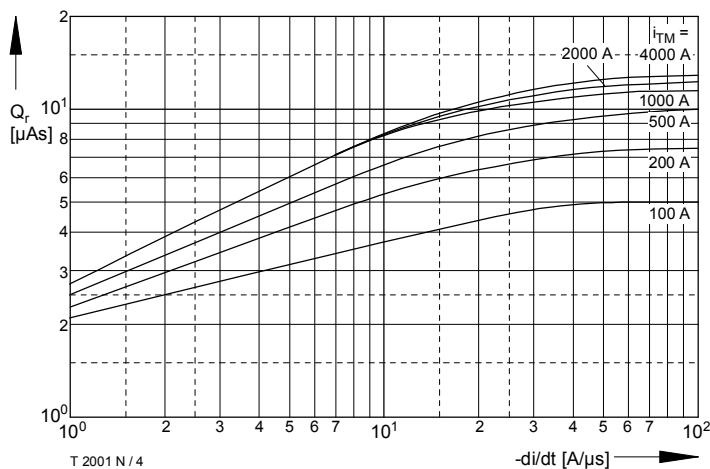


Bild / Fig. 4
Sperrverzögerungsladung / Recovered charge $Q_r = f(di/dt)$
Obergrenze (98% Wert) / Upper limit (98% value)
 $t_{vj} = t_{vj\ max}$, $V_R \leq 0,5 V_{RRM}$
Parameter: Durchlaßstrom / On-state current i_{TM}

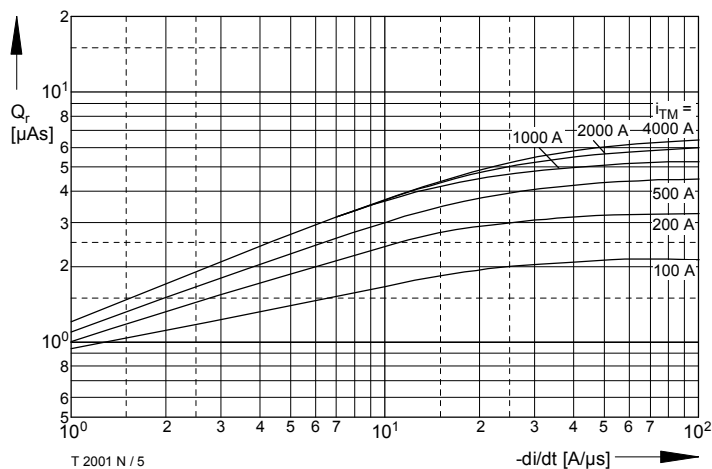


Bild / Fig. 5
Sperrverzögerungsladung / Recovered charge $Q_r = f(di/dt)$
Untergrenze (2% Wert) / Lower limit (98% value)
 $t_{vj} = t_{vj\ max}$, $V_R \leq 0,5 V_{RRM}$
Parameter: Durchlaßstrom / On-state current i_{TM}

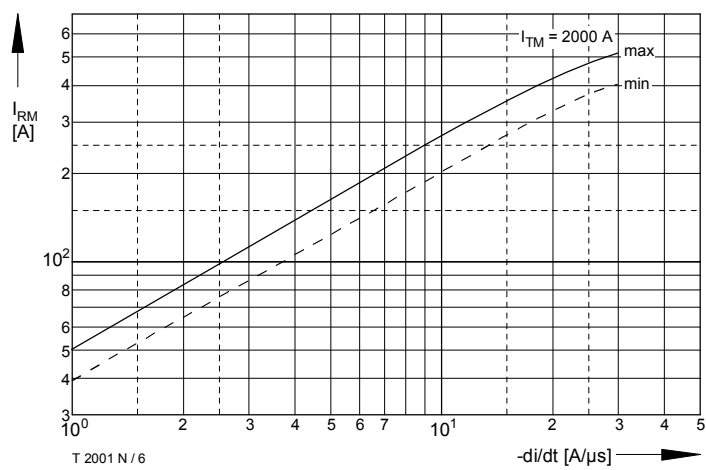


Bild / Fig. 6

Rückstromspitze / Peak reverse recovery current $I_{RM} = f(-di/dt)$
 Obergrenze (98% Wert) / Upper limit (98% value)

$t_{vj} = t_{vj \max}$, $V_R \leq 0,5 V_{RRM}$

Parameter: Durchlaßstrom / On-state current i_{TM}