

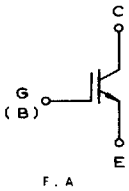
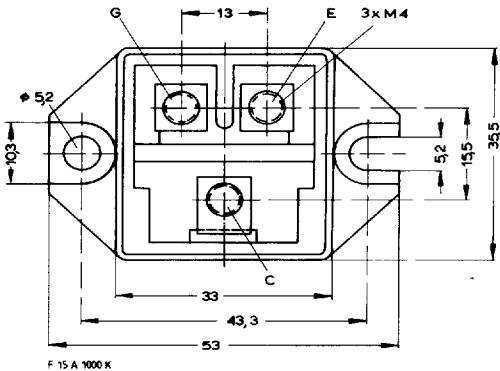
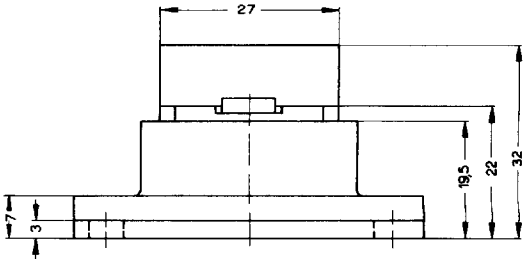
Elektrische Eigenschaften		Electrical properties	
Höchstzulässige Werte		Maximum rated values	
V_{CES}		1200	V
V_{ECS}		5	V
I_C		50	A
I_{CRM}	$t_p = 1\text{ ms}$	100	A
P_{tot}	$t_C = 25^\circ\text{C}$	300	W
V_{GE}		20	V
V_{EG}		20	V

Charakteristische Werte		Characteristic values	
$V_{CE\text{ sat}}$	$i_{CM} = 50\text{ A}, V_{GE} = 15\text{ V}, t_{vj} = 25^\circ\text{C}$	typ. 3	V
	$i_{CM} = 50\text{ A}, V_{GE} = 15\text{ V}, t_{vj} = 25^\circ\text{C}$	max. 4	V
$V_{GE\text{ (th)}}$	$V_{CE} = 5\text{ V}, i_C = 50\text{ mA}, t_{vj} = 25^\circ\text{C}$	min. 3	V
	$V_{CE} = 5\text{ V}, i_C = 50\text{ mA}, t_{vj} = 25^\circ\text{C}$	max. 6	V
C_{ies}	$V_{CE} = 10\text{ V}, V_{GE} = 0\text{ V}, f_o = 1\text{ MHz}, t_{vj} = 25^\circ\text{C}$	typ. 7,8	nF
i_{CES}	$V_{CE} = 1200\text{ V}, V_{GE} = 0\text{ V}, t_{vj} = 25^\circ\text{C}$	typ. 0,3	mA
	$V_{CE} = 1200\text{ V}, V_{GE} = 0\text{ V}, t_{vj} = 125^\circ\text{C}$	typ. 2	mA
i_{GES}	$V_{GE} = 20\text{ V}, t_{vj} = 25^\circ\text{C}$	typ. 50	nA
	$V_{GE} = 20\text{ V}, t_{vj} = 25^\circ\text{C}$	max. 500	nA
i_{EGS}	$V_{EG} = 20\text{ V}, t_{vj} = 25^\circ\text{C}$	typ. 50	nA
	$V_{EG} = 20\text{ V}, t_{vj} = 25^\circ\text{C}$	max. 500	nA
t_{on}	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 25^\circ\text{C}$	typ. 0,4	μs
	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 125^\circ\text{C}$	typ. 0,5	μs
t_s	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, V_{LR} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 25^\circ\text{C}$	typ. 0,5	μs
	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, V_{LR} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 125^\circ\text{C}$	typ. 0,6	μs
t_f	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, V_{LR} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 25^\circ\text{C}$	typ. 0,2	μs
	$i_{CM} = 50\text{ A}, V_{CE} = 600\text{ V}, V_{LF} = 15\text{ V}, V_{LR} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 125^\circ\text{C}$	typ. 0,25	μs

Bedingungen für den Kurzschlußschutz	Conditions for protection against short circuits
$t_{ig} = 10\ \mu\text{s}, V_{LF} = V_{LR} = 15\text{ V}, R_G = 24\ \Omega, t_{vj} = 125^\circ\text{C},$	$V_{CC} = 750\text{ V}, V_{CEM} = 1000\text{ V}, i_{CMK\ 1} \approx 600\text{ A}, i_{CMK\ 2} \approx 400\text{ A},$

Thermische Eigenschaften	Thermal properties
R_{thJC} DC	0,41 $^\circ\text{C/W}$

$t_{vj\text{ max}}$	150 $^\circ\text{C}$
$t_{vj\text{ op}}$	- 40 / + 150 $^\circ\text{C}$
t_{stg}	- 40 / + 125 $^\circ\text{C}$



Innere Isolation	Internal insulation
Isoliermaterial: Al N	Insulating material: Al N
V_{ISOL} RMS (f=50 Hz, t=1 min)	2,5 kV

Mechanische Eigenschaften	Mechanical properties
G	90 g
M 1	3 Nm
M 2	2 Nm