

Elektrische Eigenschaften

Electrical properties

Thermische Eigenschaften

Thermal properties

Höchstzulässige Werte

Maximum rated values

V_{CES}		1000	V
V_{ECS}		5	V
I_C		15	A
I_{CRM}	$t_p = 1 \text{ ms}$	30	A
P_{tot}	$t_C = 25^\circ\text{C}$	125	W
V_{GE}		20	V
V_{EG}		20	V

 R_{thJC}

DC

1

 $^\circ\text{C/W}$ t_{vjmax} t_{vjop} t_{stg}

150

 $-40 / + 150$ $-40 / + 125$ $^\circ\text{C}$ $^\circ\text{C}$ $^\circ\text{C}$

Charakteristische Werte

Characteristic values

$V_{CE \text{ sat}}$	$i_{CM} = 15 \text{ A}$	$v_{GE} = 15 \text{ V}$	$t_{vj} = 25^\circ\text{C}$	typ.	3	V
	$i_{CM} = 15 \text{ A}$	$v_{GE} = 15 \text{ V}$	$t_{vj} = 25^\circ\text{C}$	max.	5	V
$V_{GE} \text{ (th)}$	$v_{CE} = 5 \text{ V}$	$i_C = 15 \text{ mA}$	$t_{vj} = 25^\circ\text{C}$	min.	3	V
	$v_{CE} = 5 \text{ V}$	$i_C = 15 \text{ mA}$	$t_{vj} = 25^\circ\text{C}$	max.	6	V
C_{GE}	$v_{CE} = 10 \text{ V}$	$v_{GE} = 0 \text{ V}$				
	$f_o = 1 \text{ MHz}$	$t_{vj} = 25^\circ\text{C}$		typ.	2	nF
i_{CES}	$v_{CE} = 1000 \text{ V}$	$v_{GE} = 0 \text{ V}$	$t_{vj} = 25^\circ\text{C}$	typ.	0,2	mA
	$v_{CE} = 1000 \text{ V}$	$v_{GE} = 0 \text{ V}$	$t_{vj} = 125^\circ\text{C}$	typ.	1	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}	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$R_G = 100 \Omega$	$t_{vj} = 25^\circ\text{C}$	typ.	0,4	μs
	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$R_G = 100 \Omega$	$t_{vj} = 125^\circ\text{C}$	typ.	0,5	μs
t_s	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$v_{LR} = 15 \text{ V}$				
	$R_G = 100 \Omega$	$t_{vj} = 25^\circ\text{C}$		typ.	0,5	μs
	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$v_{LR} = 15 \text{ V}$				
	$R_G = 100 \Omega$	$t_{vj} = 125^\circ\text{C}$		typ.	0,7	μs
t_f	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$v_{LR} = 15 \text{ V}$				
	$R_G = 100 \Omega$	$t_{vj} = 25^\circ\text{C}$		typ.	0,3	μs
	$i_{CM} = 15 \text{ A}$	$v_{CE} = 600 \text{ V}$				
	$v_{LF} = 15 \text{ V}$	$v_{LR} = 15 \text{ V}$				
	$R_G = 100 \Omega$	$t_{vj} = 125^\circ\text{C}$		typ.	0,4	μs

Bedingungen für den Kurzschlußschutz

$t_{fg} = 10 \mu\text{s}$,
 $v_{LF} = v_{LR} = 15 \text{ V}$,
 $R_G = 100 \Omega$,
 $t_{vj} = 125^\circ\text{C}$,

Conditions for protection against short circuits

$V_{CC} = 750 \text{ V}$,
 $V_{CEM} = 850 \text{ V}$,
 $i_{CMK1} \approx 210 \text{ A}$,
 $i_{CMK2} \approx 120 \text{ A}$

Innere Isolation

Isoliermaterial: AlN

 V_{ISOL} RMS

Internal insulation

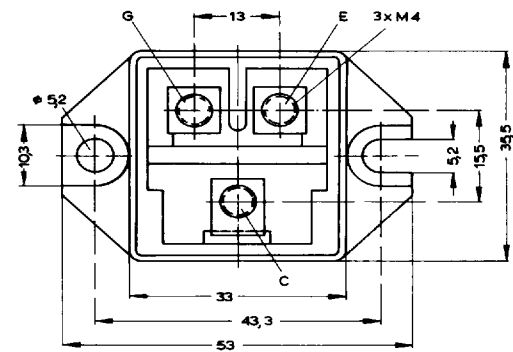
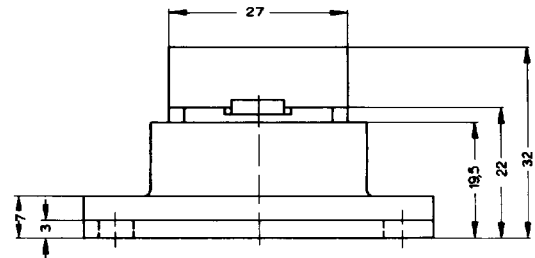
Insulating material: AlN

2,5 kV

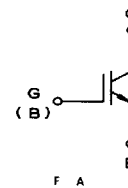
Mechanische Eigenschaften

Mechanical properties

G	90	g
M1	3	Nm
M2	2	Nm



F 15 A 1000 K



F A