

Transistor	Transistor
Elektrische Eigenschaften	Electrical properties
Höchstzulässige Werte	Maximum rated values
V _{CES}	1200 V
I _C	15 A
I _{CRM} t _p = 1 ms	30 A
P _{tot} t _C = 25°C	125 W
V _{GE}	20 V
V _{EG}	20 V

Charakteristische Werte	Characteristic values
V _{CE sat}	i _{CM} = 15 A, v _{GE} = 15 V, t _{vj} = 25°C typ. 3 V
	i _{CM} = 15 A, v _{GE} = 15 V, t _{vj} = 25°C max. 4 V
v _{GE (th)}	v _{CE} = 5 V, i _C = 15 mA, t _{vj} = 25°C min. 3 V
	v _{CE} = 5 V, i _C = 15 mA, t _{vj} = 25°C max. 6 V
C _{ies}	v _{CE} = 10 V, v _{GE} = 0 V, f _o = 1 MHz, t _{vj} = 25°C, typ. 1,2 nF
i _{CES}	v _{CE} = 1200 V, v _{GE} = 0 V, t _{vj} = 25°C typ. 0,2 mA
	v _{CE} = 1200 V, v _{GE} = 0 V, t _{vj} = 125°C typ. 1 mA
i _{GES}	v _{GE} = 20 V, t _{vj} = 25°C, typ. 1 µA
	v _{GE} = 20 V, t _{vj} = 25°C, max. 10 µA
i _{EGS}	v _{EG} = 20 V, t _{vj} = 25°C, typ. 1 µA
	v _{EG} = 20 V, t _{vj} = 25°C, max. 10 µA
t _{on}	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, R _G = 100 Ω, t _{vj} = 25°C typ. 0,4 µs
	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, R _G = 100 Ω, t _{vj} = 125°C typ. 0,5 µs
t _s	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, v _{LR} = 15 V, R _G = 100 Ω, t _{vj} = 25°C typ. 0,5 µs
	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, v _{LR} = 15 V, R _G = 100 Ω, t _{vj} = 125°C typ. 0,6 µs
t _f	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, v _{LR} = 15 V, R _G = 100 Ω, t _{vj} = 25°C typ. 0,2 µs
	i _{CM} = 15 A, v _{CE} = 600 V, v _{LF} = 15 V, v _{LR} = 15 V, R _G = 100 Ω, t _{vj} = 125°C typ. 0,25 µs

Bedingungen für den Kurzschlußschutz	Conditions for protection against short circuits
t _{ig} = 10 µs,	V _{CC} = 750 V,
v _{LF} = v _{LR} = 15 V,	v _{CEM} = 1000 V,
R _G = 100 Ω,	i _{CMK 1} ≈ 140 A,
t _{vj} = 125°C,	i _{CMK 2} ≈ 90 A.

Thermische Eigenschaften	Thermal properties
R _{thJC}	DC, pro Baustein / per module 0,167 °C/W
	DC, pro Zweig / per arm 1 °C/W

t _{vj max}	150 °C
t _{vj op}	- 40 / + 150 °C
t _{stg}	- 40 / + 125 °C

Inversdiode	Inverse diode
Elektrische Eigenschaften	Electrical properties

Höchstzulässige Werte	Maximum rated values
I _{F(max)}	15 A
I _{FRM} t _p = 1 ms	30 A

Charakteristische Werte	Characteristic values
v _F	i _F = 15 A, v _{GE} = 0 V, t _{vj} = 25°C typ. 1,8 V
	i _F = 15 A, v _{GE} = 0 V, t _{vj} = 25°C max. 2,5 V
I _{RM}	i _{FM} = 15 A, -di _F /dt = 100 A/µs v _{EG} = 10 V, t _{vj} = 25°C typ. 7 A
	i _{FM} = 15 A, -di _F /dt = 100 A/µs v _{EG} = 10 V, t _{vj} = 125°C typ. 12 A
Q _r	i _{FM} = 15 A, -di _F /dt = 100 A/µs v _{EG} = 10 V, t _{vj} = 25°C typ. 0,8 µAs
	i _{FM} = 15 A, -di _F /dt = 100 A/µs v _{EG} = 10 V, t _{vj} = 125°C typ. 2,5 µAs

Thermische Eigenschaften	Thermal properties
R _{thJC}	DC, pro Baustein / per module 0,3 °C/W
	DC, pro Zweig / per arm 1,8 °C/W

t _{vj max}	125 °C
t _{vj op}	- 40 / + 125 °C
t _{stg}	- 40 / + 125 °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	220 g
M 1	3 Nm

Maßbild	outline
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