

Absolute Maximum Ratings				
Symbol	Conditions		Values	Unit
Chip				
$I_{T(AV)}$	sinus 180°	$T_c = 85\text{ °C}$	1200	A
		$T_c = 100\text{ °C}$	840	A
I_{TSM}	10 ms	$T_j = 25\text{ °C}$	30000	A
		$T_j = 125\text{ °C}$	25500	A
i^2t	10 ms	$T_j = 25\text{ °C}$	4500000	A ² s
		$T_j = 125\text{ °C}$	3251250	A ² s
V_{RSM}			1200	V
V_{RRM}			1200	V
V_{DRM}			1200	V
$(di/dt)_{cr}$	$T_j = 125\text{ °C}$		125	A/μs
$(dv/dt)_{cr}$	$T_j = 125\text{ °C}$		1000	V/μs
T_j			-40 ... +125	°C
Module				
T_{sig}			-40 ... +130	°C

Characteristics						
Symbol	Conditions		min.	typ.	max.	Unit
Chip						
V_T	$T_j = 25\text{ °C}, I_T = 3600\text{ A}$				1.65	V
$V_{T(TO)}$	$T_j = 125\text{ °C}$				0.95	V
r_T	$T_j = 125\text{ °C}$				0.18	mΩ
$I_{DD}; I_{RD}$	$T_j = 125\text{ °C}, V_{DD} = V_{DRM}; V_{RD} = V_{RRM}$				160	mA
t_{gd}	$T_j = 25\text{ °C}, I_G = 1\text{ A}, di_G/dt = 1\text{ A}/\mu\text{s}$			1		μs
t_{gr}	$V_D = 0.67 \cdot V_{DRM}$			2		μs
t_q	$T_j = 125\text{ °C}$		100		250	μs
I_H	$T_j = 25\text{ °C}$			250	500	mA
I_L	$T_j = 25\text{ °C}, R_G = 33\text{ }\Omega$			500	2000	mA
V_{GT}	$T_j = 25\text{ °C}, \text{d.c.}$		3			V
I_{GT}	$T_j = 25\text{ °C}, \text{d.c.}$		250			mA
V_{GD}	$T_j = 125\text{ °C}, \text{d.c.}$				0.25	V
I_{GD}	$T_j = 125\text{ °C}, \text{d.c.}$				10	mA
$R_{th(j-c)}$	continuous DC	SSC				K/W
		DSC			0.021	K/W
$R_{th(j-c)}$	sin. 180°	SSC			0.054	K/W
		DSC			0.0225	K/W
$R_{th(j-c)}$	rec. 120°	SSC			0.06	K/W
		DSC			0.027	K/W
Module						
$R_{th(c-s)}$	SSC			0.01		K/W
	DSC			0.005		K/W
F			22		25	KN
a						m/s ²
w				480		g

