

PRELIMINARY TECHNICAL INFORMATION

HIGHLIGHTS

- Standard compatible package
- Hard solder joints
- Solid trough ceramic copper base



TECHNICAL SPECIFICATIONS

Electrical properties

non-contractual image

Symbol	Parameter	Notes and Conditions	Min	Typ	Max	Units
V_{RRM}	Repetitive reverse voltage		-	1600	-	V
I_{AV}	Average forward current	$T_j=125^\circ\text{C}$	-	106	-	A
I_{AV}	R.M.S. Forward current	$T_j=125^\circ\text{C}$	-	166	-	A
I_{FSM}	Surge forward current	$T_j=125^\circ\text{C}, V_r=0,8V_{RRM}, t_p=10\text{ms}$	-	2250	-	A
I^2t	I^2t value		-	2,5	-	kA^2t
dv/dt	dv/dt value		-	-	500	$\text{V}/\mu\text{s}$
di/dt	di/dt value		-	100	-	$\text{A}/\mu\text{s}$
I_{RRM}	Reverse current	$T_j=25\dots125^\circ\text{C}$	4	-	20	mA
V_0	Treshold voltage		-	0,9	-	V
r_0	Slope resistance		-	2,0	-	mOhm
V_F	On state voltage	$T_j=25^\circ\text{C}, I_{TM}=300\text{A}$	-	1,65	-	V
I_{GT}	Gate current	$T_j=25^\circ\text{C}$	-	100	-	mA
V_{GT}	Gate voltage	$T_j=25^\circ\text{C}$	-	2,0	-	V
I_L	Latching current	$T_j=25^\circ\text{C}$	-	600	-	mA
I_H	Holding current	$T_j=25^\circ\text{C}$	-	250	-	mA
V_{isol}	Module base isolation	Ac 50Hz / 1 min	-	3000	-	V

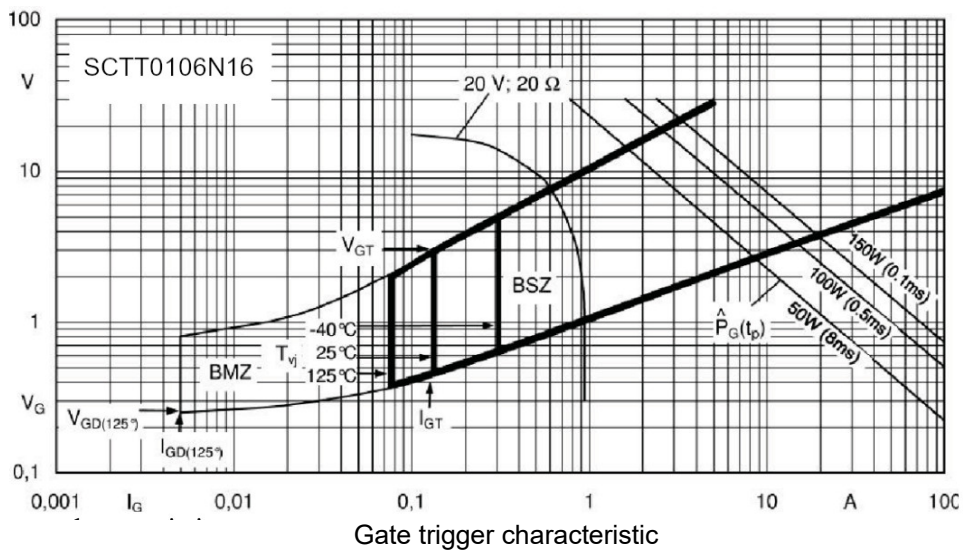
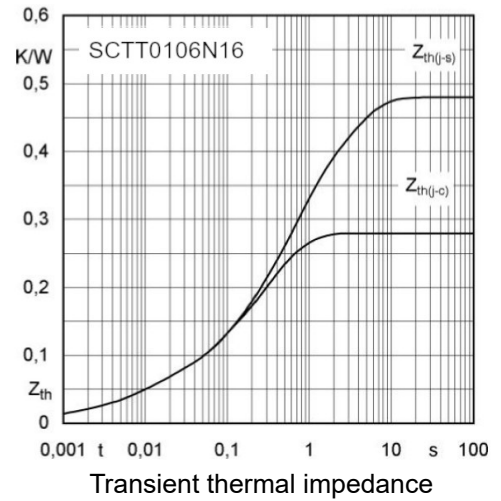
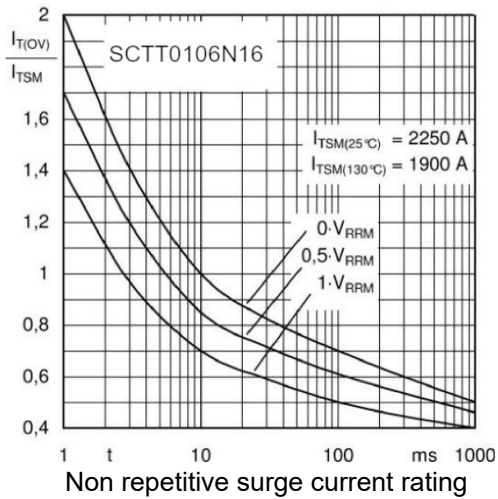
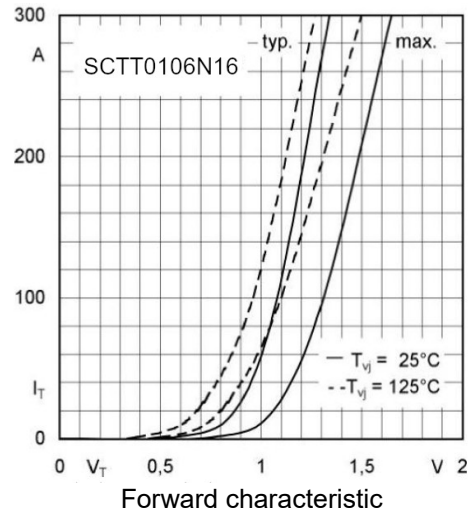
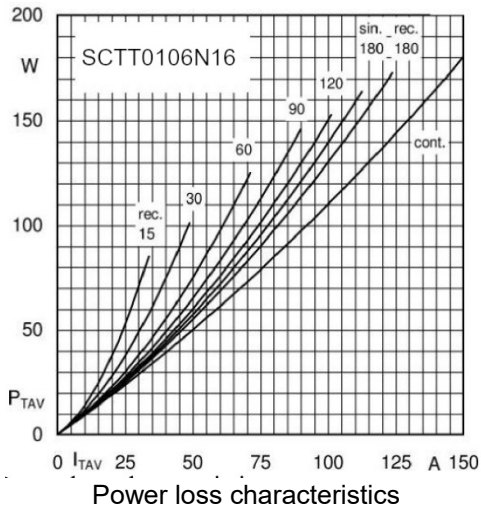
Thermal properties

Symbol	Parameter	Notes and Conditions	Min	Typ	Max	Units
$T_{min\dots T_{max}}$	Max. operating junction temperature		-40	-	125	$^\circ\text{C}$
T_{stg}	Storage temperature		-40	-	125	$^\circ\text{C}$
$R_{TH_{jc}}$	Thermal resistance junction-capsule (Single thyristor)	DC (continuous)	-	0,28	-	K/W
		Sin 180°	-	0,30	-	K/W
		Sin 120°	-	0,32	-	K/W
$R_{TH_{ch}}$	Thermal resistance capsule-heatsink	For module	-	0,10	-	K/W

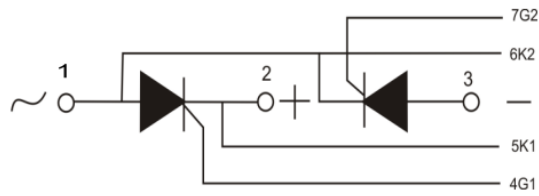
Mechanical properties

Symbol	Parameter	Notes and Conditions	Min	Typ	Max	Units
V_{cc}	Weight		-	95	-	g
M1	Mounting torque		4,25	5,00	5,75	Nm
M2	Terminal mounting torque (M5)		2,55	3,00	3,45	Nm

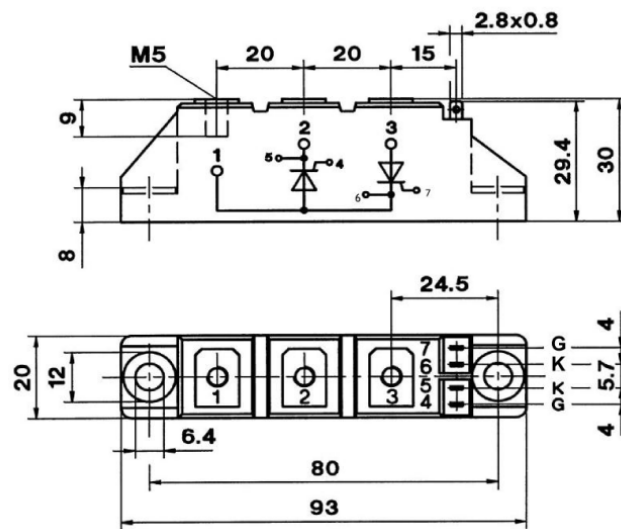
200601 Rev.:0



CIRCUIT DIAGRAM



DIMENSIONS



All dimensions in mm

Cost Effective Products

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