



V_{RSM} V	V_{RRM}, V_{DRM} V	$I_{TRMS} = 600$ A (maximum value for continuous operation) $I_{TAV} = 330$ A (sin. 180; $T_C = 78^\circ\text{C}$)		
1300	1200	AMET 330-12E		
1500	1400	AMET 330-14E		
1700	1600	AMET 330-16E		
1900	1800	AMET 330-18E		
2300	2200	AMET 330-22E		

Symbols and parameters			Values	Units
I_{TAV}	Average on-state current	sin 180; $T_C = 85$ (100) $^\circ\text{C}$	295 (210)	A
I_D	Direct output current	P16/300F; $T_a = 35^\circ\text{C}$; B2/B6	530 / 665	A
I_{RMS}	Maximum RMS current	P16/400F; $T_a = 35^\circ\text{C}$; W1/W3	685 / 3*550	A
I_{TSM}	Surge on-state current	$T_{vj} = 25^\circ\text{C}$; 10 ms $T_{vj} = 130^\circ\text{C}$; 10 ms	9000 8000	A A
I^2t	I^2t value, rating for fusing	$T_{vj} = 25^\circ\text{C}$; 8.3...10 ms $T_{vj} = 130^\circ\text{C}$; 8.3...10 ms	405000 320000	A^2s A^2s
V_T	On-state voltage	$T_{vj} = 25^\circ\text{C}$; $I_T = 1500$ A	max. 2.05	V
$V_{T(TO)}$	On-state threshold voltage	$T_{vj} = 130^\circ\text{C}$	max. 1.2	V
r_T	On-state slope resistance	$T_{vj} = 130^\circ\text{C}$	max. 0.55	$\text{m}\Omega$
$I_{DD}; I_{RD}$	Forward off-state current; Direct reverse current	$T_{vj} = 130^\circ\text{C}$; $V_{RD} = V_{RRM}$; $V_{DD} = V_{DRM}$	max. 200	mA
t_{gd}	Gate controlled turn-on delay time	$T_{vj} = 25^\circ\text{C}$; $I_G = 1$ A; $di_G/dt = 1$ A/ μs	1	μs
t_{gr}	Gate controlled rise time	$V_D = 0,67 * V_{DRM}$	2	μs
$(di/dt)_{cr}$	Critical rate of rise of on-state current	$T_{vj} = 130^\circ\text{C}$	max. 125	A/ μs
$(dv/dt)_{cr}$	Critical rate of rise of off-state voltage	$T_{vj} = 130^\circ\text{C}$	max. 1000	
t_q	Turn-off time	$T_{vj} = 130^\circ\text{C}$	150 ... 200	μs
I_H	Holding current	$T_{vj} = 25^\circ\text{C}$; typ. / max	150 / 500	mA
I_L	Latching current	$T_{vj} = 25^\circ\text{C}$; $R_G = 33 \Omega$; typ. / max	500 / 2000	mA
V_{GT}	Gate trigger voltage	$T_{vj} = 25^\circ\text{C}$; d.c.	min. 3	V
I_{GT}	Gate trigger current	$T_{vj} = 25^\circ\text{C}$; d.c.	min. 200	mA
V_{GD}	Gate non-trigger voltage	$T_{vj} = 130^\circ\text{C}$; d.c.	max. 0.25	V
I_{GD}	Gate non-trigger current	$T_{vj} = 130^\circ\text{C}$; d.c.	max. 10	mA
$R_{th(j-c)}$	Thermal resistance, junction to case	cont.; per module	0.09	K/W
		sin.180; per module	0.095	K/W
		rec.120; per module	0.11	K/W
$R_{th(c-s)}$	Thermal resistance, junction to heatsink	per module	0.02	K/W
T_{vj}	Virtual junction temperature		-40 ... +130	$^\circ\text{C}$
T_{stg}	Storage temperature range		-40 ... +130	$^\circ\text{C}$
V_{isol}	Insulation test voltage (r.m.s.)	a.c. 50 Hz; r.m.s.; 1s / 1min.	3600 / 3000	V \sim
M_s	Mounting torque on heatsink		$5 \pm 15\%$	Nm
M_t	Mounting torque for terminals		$17 \pm 15\%$	Nm
a	Maximum allowable acceleration		$5 * 9.81$	m/s^2
W	Weight	approx.	840	g

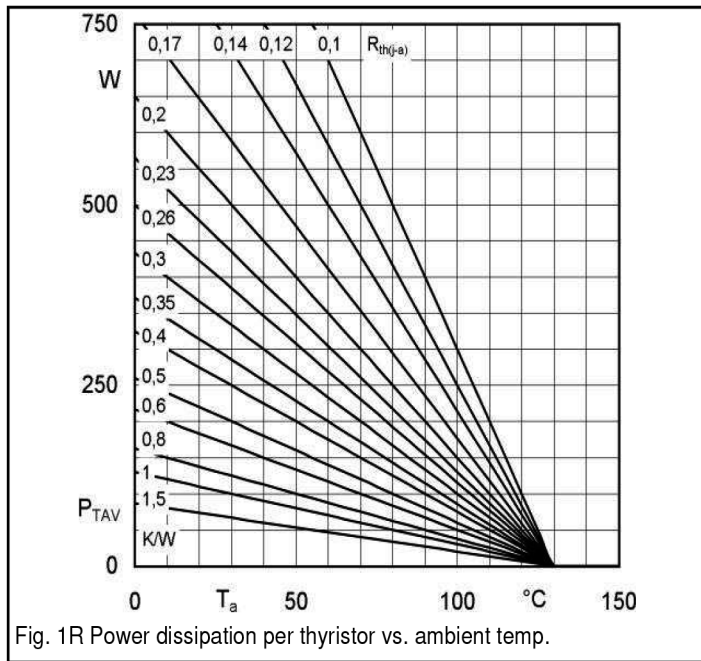
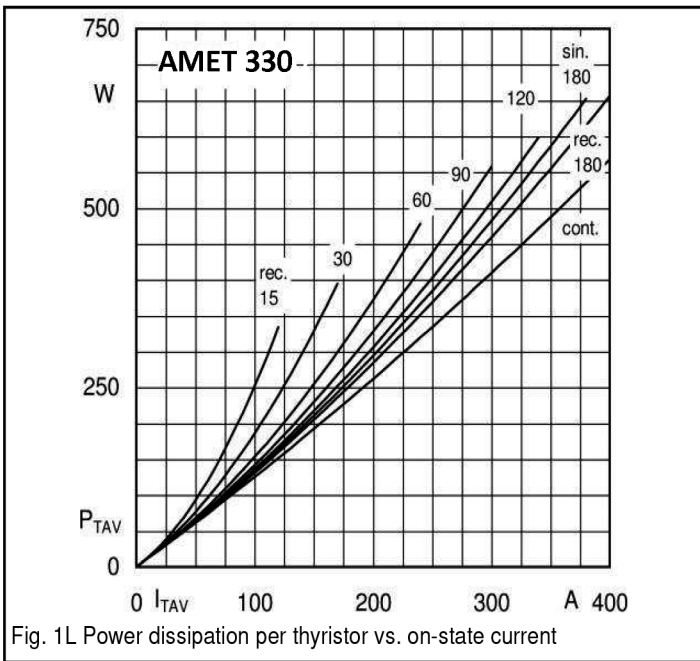


Fig. 1L Power dissipation per thyristor vs. on-state current

Fig. 1R Power dissipation per thyristor vs. ambient temp.

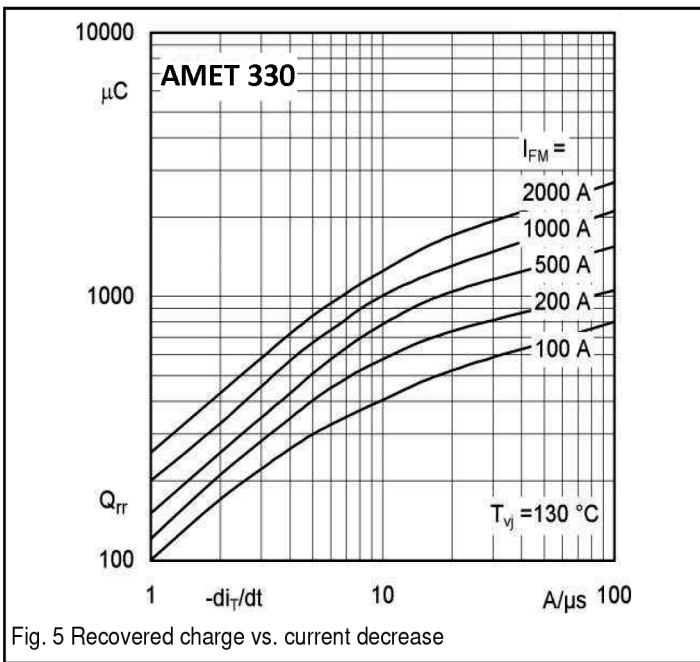


Fig. 5 Recovered charge vs. current decrease

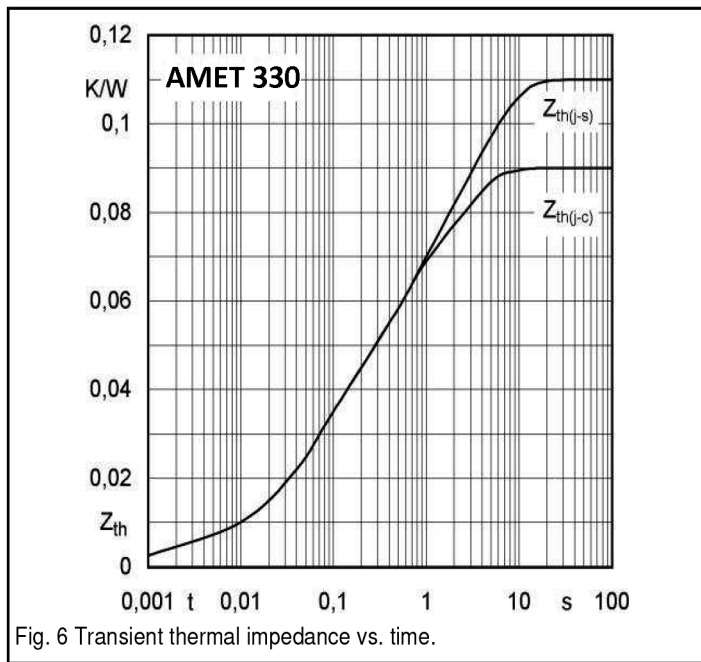


Fig. 6 Transient thermal impedance vs. time.

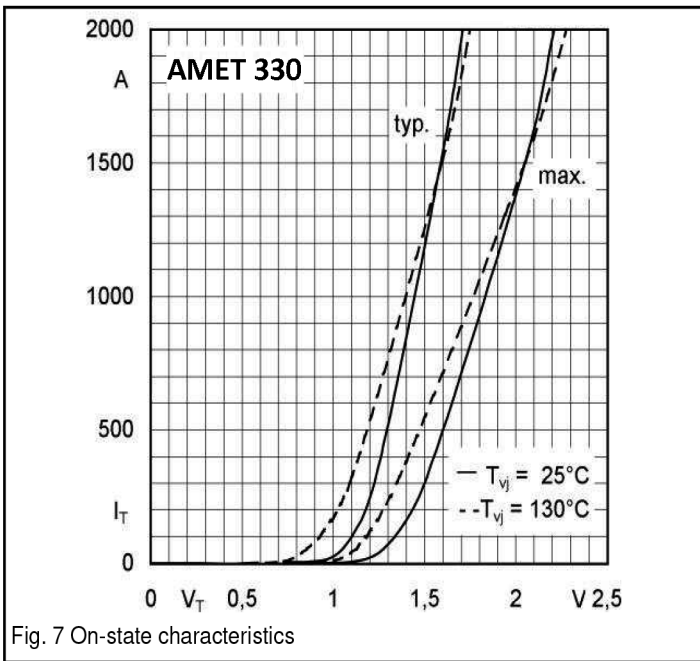


Fig. 7 On-state characteristics

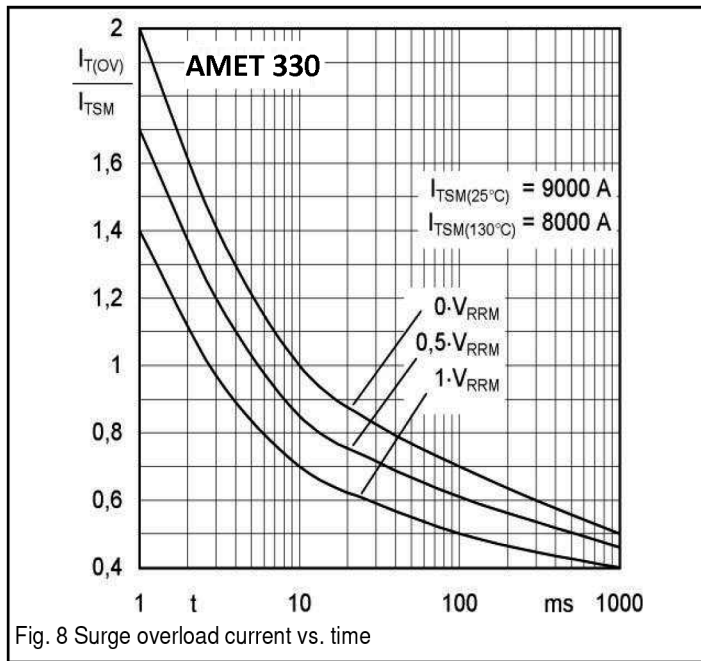
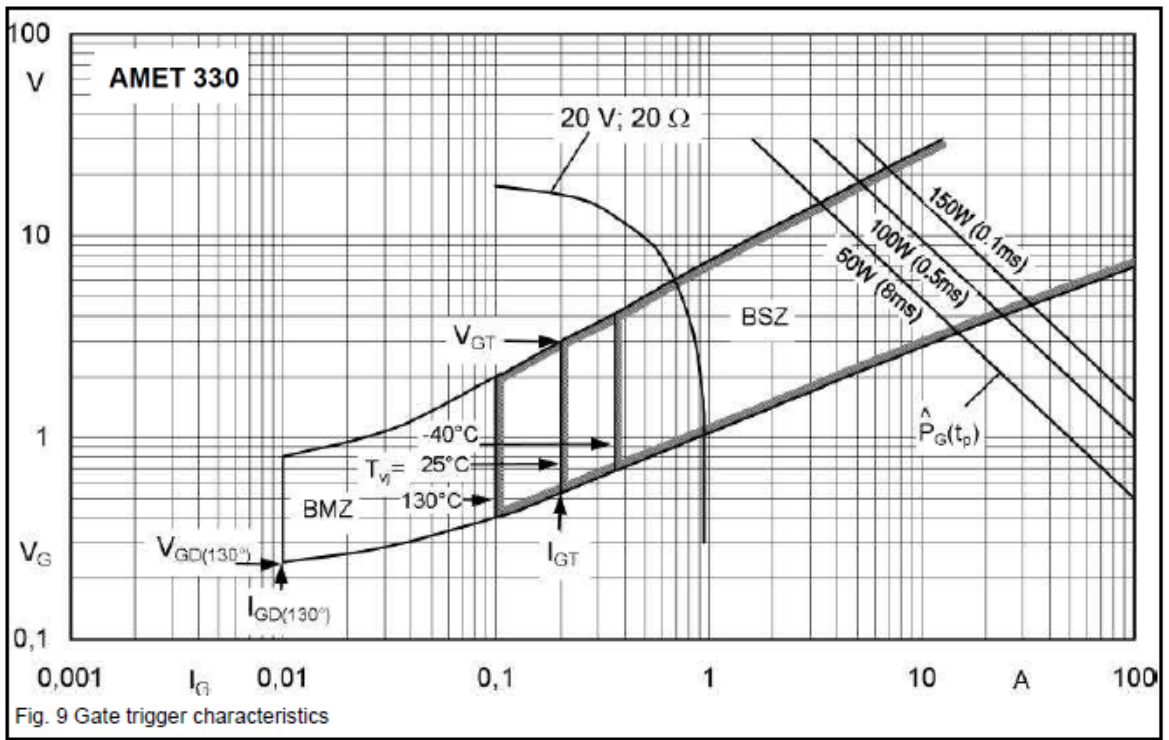
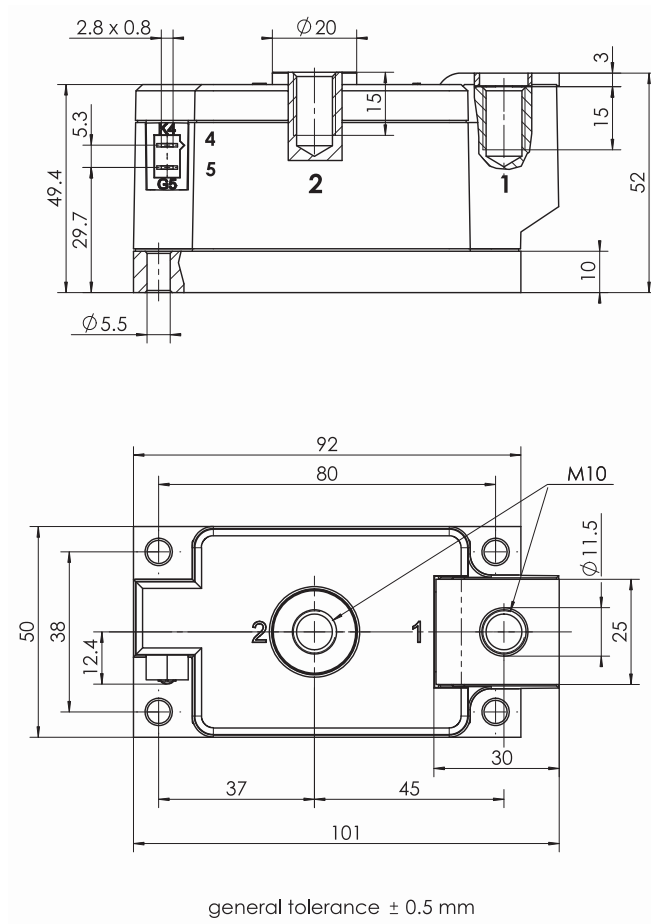


Fig. 8 Surge overload current vs. time



DIMENSIONS



TOPOLOGY OF INTERNAL CONNECTION

