

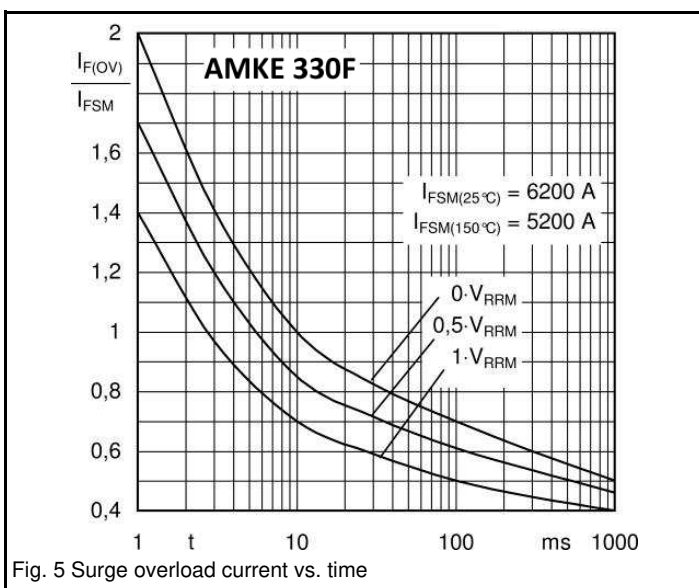
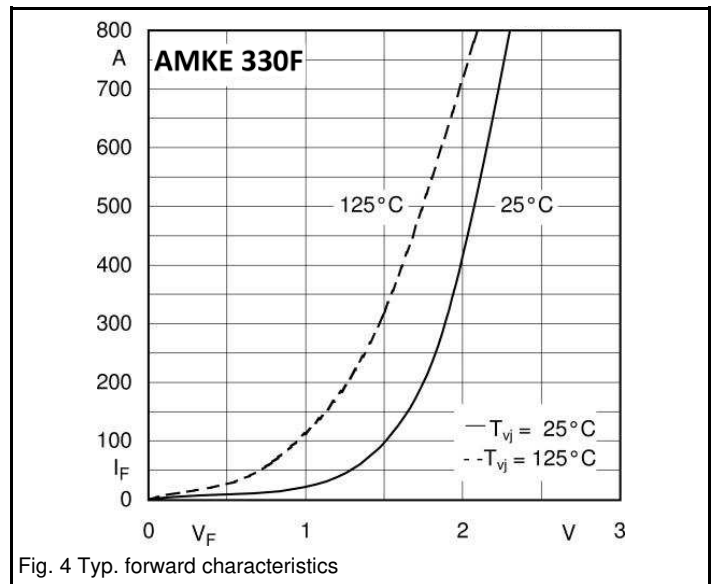
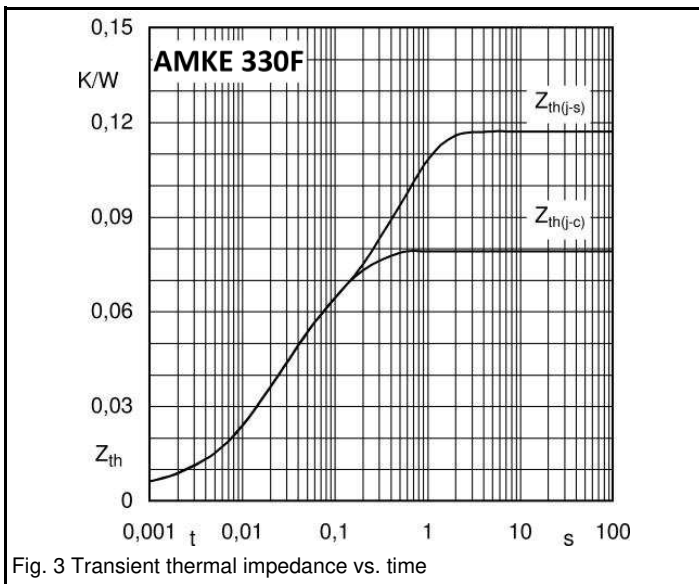
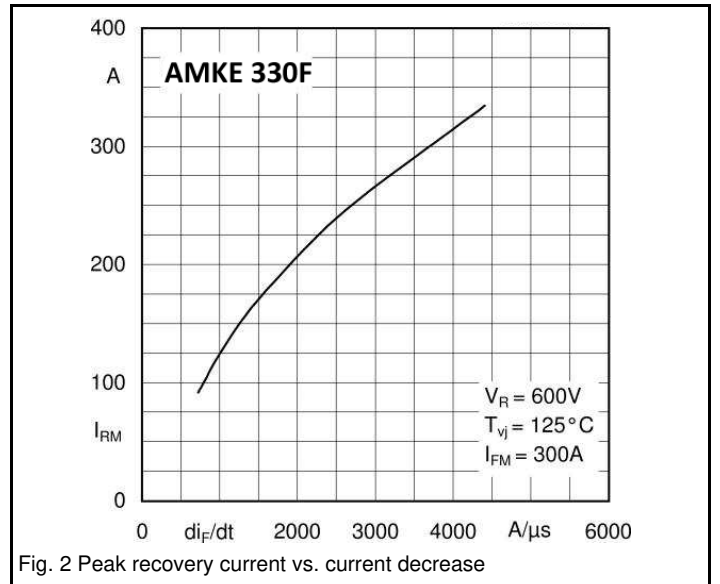
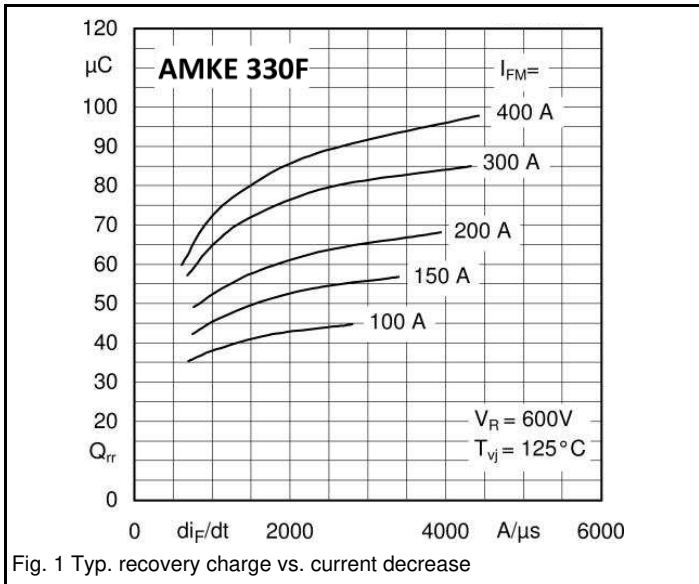
Fast Diode Modules

AMKE 330F

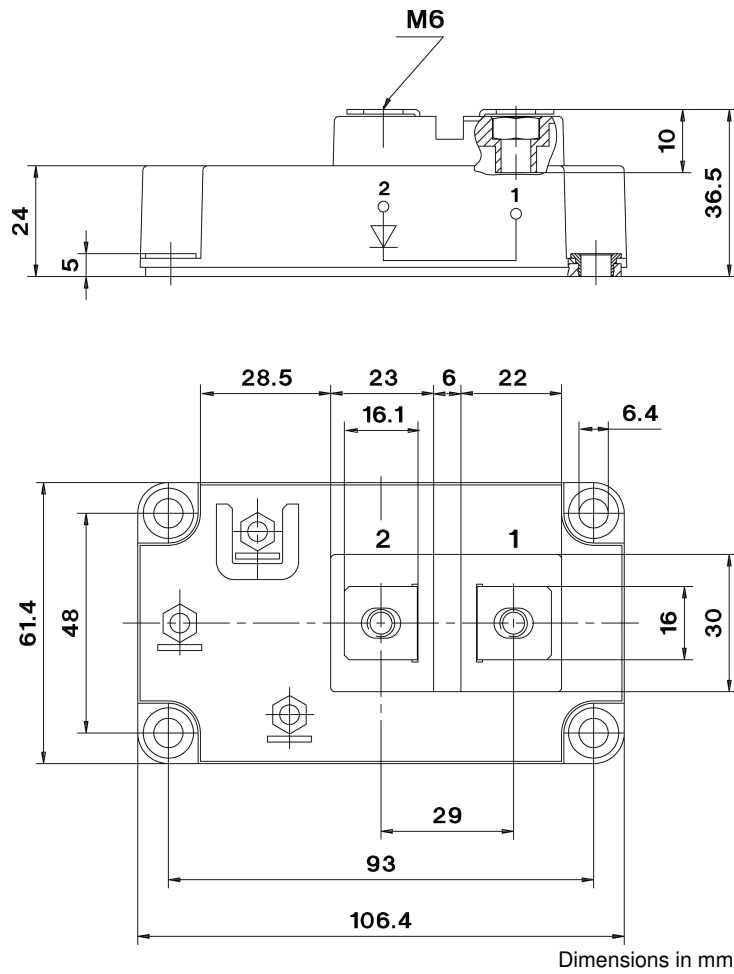


V_{RSM} V	V_{RRM} V	$I_{FRMS} = 450$ A (maximum value for continuous operation) $I_{FAV} = 330$ A (sin. 180; 50 Hz; $T_C = 70^\circ\text{C}$)		
1700	1700	AMKE 330-F17		

Symbols and parameters			Values	Units
I_{FAV}	Mean forward current	sin 180; $T_C = 85$ (100) $^\circ\text{C}$	290 (240)	A
I_{FSM}	Surge forward current	$T_{vj} = 25^\circ\text{C}$; 10 ms $T_{vj} = 150^\circ\text{C}$; 10 ms	6200 5200	A A
i^2t	i^2t value, rating for fusing	$T_{vj} = 25^\circ\text{C}$; 8.3...10 ms $T_{vj} = 150^\circ\text{C}$; 8.3...10 ms	192000 135000	A^2s A^2s
V_F	Forward voltage	$T_{vj} = 25^\circ\text{C}$; $I_F = 330$ A	max. 2	V
$V_{(TO)}$	On-state threshold voltage	$T_{vj} = 150^\circ\text{C}$	max. 1.5	V
r_T	On-state slope resistance	$T_{vj} = 150^\circ\text{C}$	max. 1.9	$\text{m}\Omega$
I_{RD}	Direct reverse current	$T_{vj} = 25^\circ\text{C}$; $V_{RD} = V_{RRM}$ $T_{vj} = 150^\circ\text{C}$; $V_{RD} = V_{RRM}$	max. 2 max. 30	mA
Q_{rr}	Reverse recovery charge		80	μC
I_{RM}	Peak reverse recovery current	$T_{vj} = 125^\circ\text{C}$ $I_F = 330$ A	220	A
t_{rr}	Reverse recovery time	$di/dt_{off} = 2000$ A/ μs $V_R = 1200$ V	990	ns
E_{rr}	Energy dissipation during reverse recovery		25	mJ
$R_{th(j-c)}$	Thermal resistance, junction to case	DC	0.079	K/W
$R_{th(c-s)}$	Thermal resistance, junction to heatsink		0.038	K/W
T_{vj}	(Virtual) junction temperature		-40 ... +150	$^\circ\text{C}$
T_{stg}	Storage temperature range		-40 ... +125	$^\circ\text{C}$
V_{isol}	Insulation test voltage (r.m.s.)	a.c. 50 Hz; r.m.s.; 1s / 1min	4800 / 4000	V \sim
M_s	Mounting torque on heatsink		3 ... 5	Nm
M_t	Mounting torque for terminals		2.5...5	Nm
a	Maximum allowable acceleration		5*9.81	m/s^2
W	Weight		330	g



DIMENSIONS



TOPOLOGY OF INTERNAL CONNECTION

