

Rectifier Diode Modules AMKE 212-16 H2



Symbols and parameters			Values	Units
I_{FAV}	Mean forward current	sin 180; $T_{j\max} = 135^{\circ}\text{C}$; $T_C = 85(100)^{\circ}\text{C}$	213 (165)	A
V_{RSM}	Non-repetitive peak reverse voltage	$T_j = 25^{\circ}\text{C}$	1700	V
V_{RRM}	Repetitive peak reverse voltage	$T_j = 25^{\circ}\text{C}$	1600	V
I_{FSM}	Surge forward current	$T_j = 25^{\circ}\text{C}$; 10 ms $T_j = 135^{\circ}\text{C}$; 10 ms	6600 5500	A A
i^2t	i^2t value, rating for fusing	$T_j = 25^{\circ}\text{C}$; 10 ms $T_j = 135^{\circ}\text{C}$; 10 ms	217800 151250	A^2s A^2s
V_F	Forward voltage	$T_j = 25^{\circ}\text{C}$; $I_F = 500\text{ A}$	max. 1.40	V
V_{FO}	Forward threshold voltage	$T_j = 135^{\circ}\text{C}$	max. 0.75	V
r_F	Forward slope resistance	$T_j = 135^{\circ}\text{C}$	max. 1.05	$\text{m}\Omega$
I_R	Reverse current	$T_j = 135^{\circ}\text{C}$, $V_{RD} = V_{RRM}$	max. 9	mA
$R_{th(j-c)}$	Thermal resistance, junction to case	cont.; per chip / per module sin.180°; per chip / per module	0.18 0.18	K/W K/W
$R_{th(c-s)}$	Thermal resistance, junction to heatsink	per chip / per module	0.05	K/W
T_j	Junction temperature		-40 ... +135	$^{\circ}\text{C}$
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.	3600 / 3000	V
M_s	Mounting torque on heatsink	min / max	4.25 / 5.75	Nm
M_t	Mounting torque for terminals	min / max	4.25 / 5.75	Nm
a	Maximum allowable acceleration		5*9.81	m/s^2
W	Weight		165	g

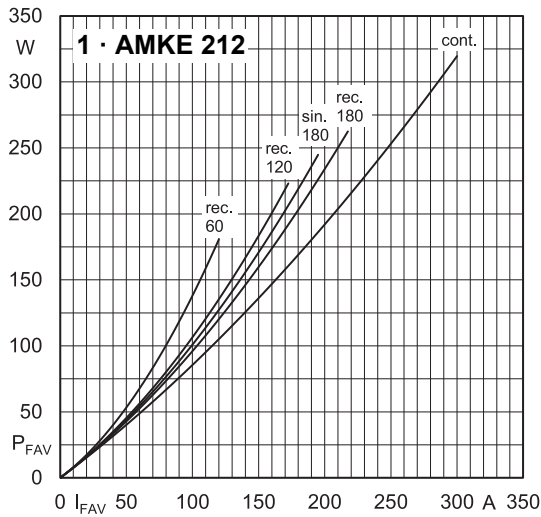


Fig. 11L: Power dissipation per diode vs. forward current

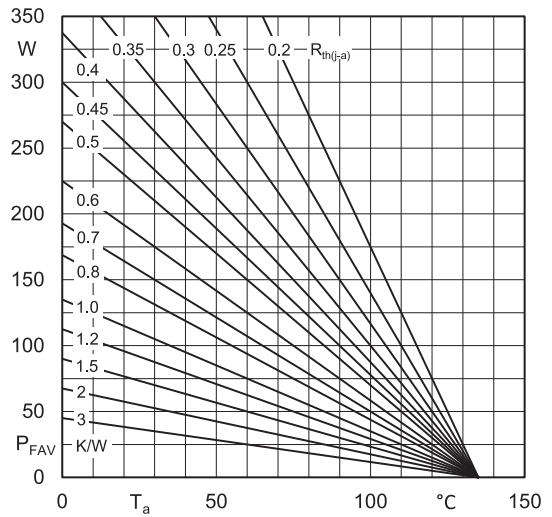


Fig. 11R: Power dissipation per diode vs. ambient temperature

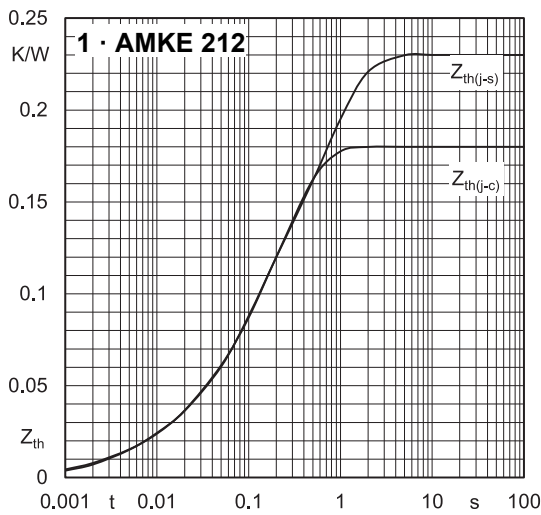


Fig. 14: Transient thermal impedance vs. time

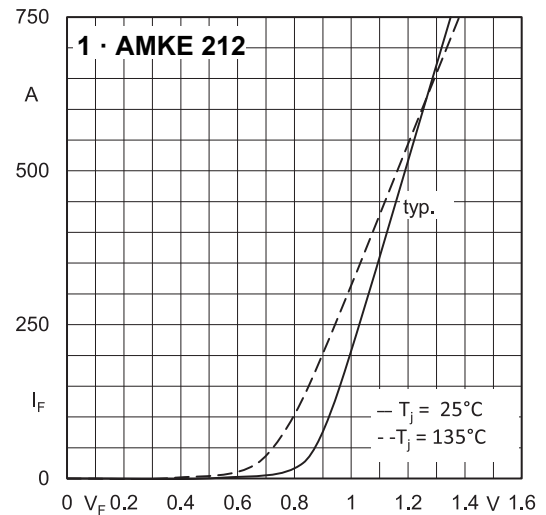


Fig. 15: Forward characteristics

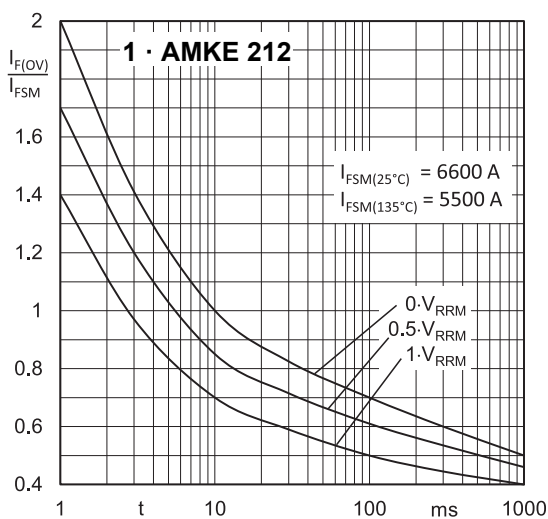
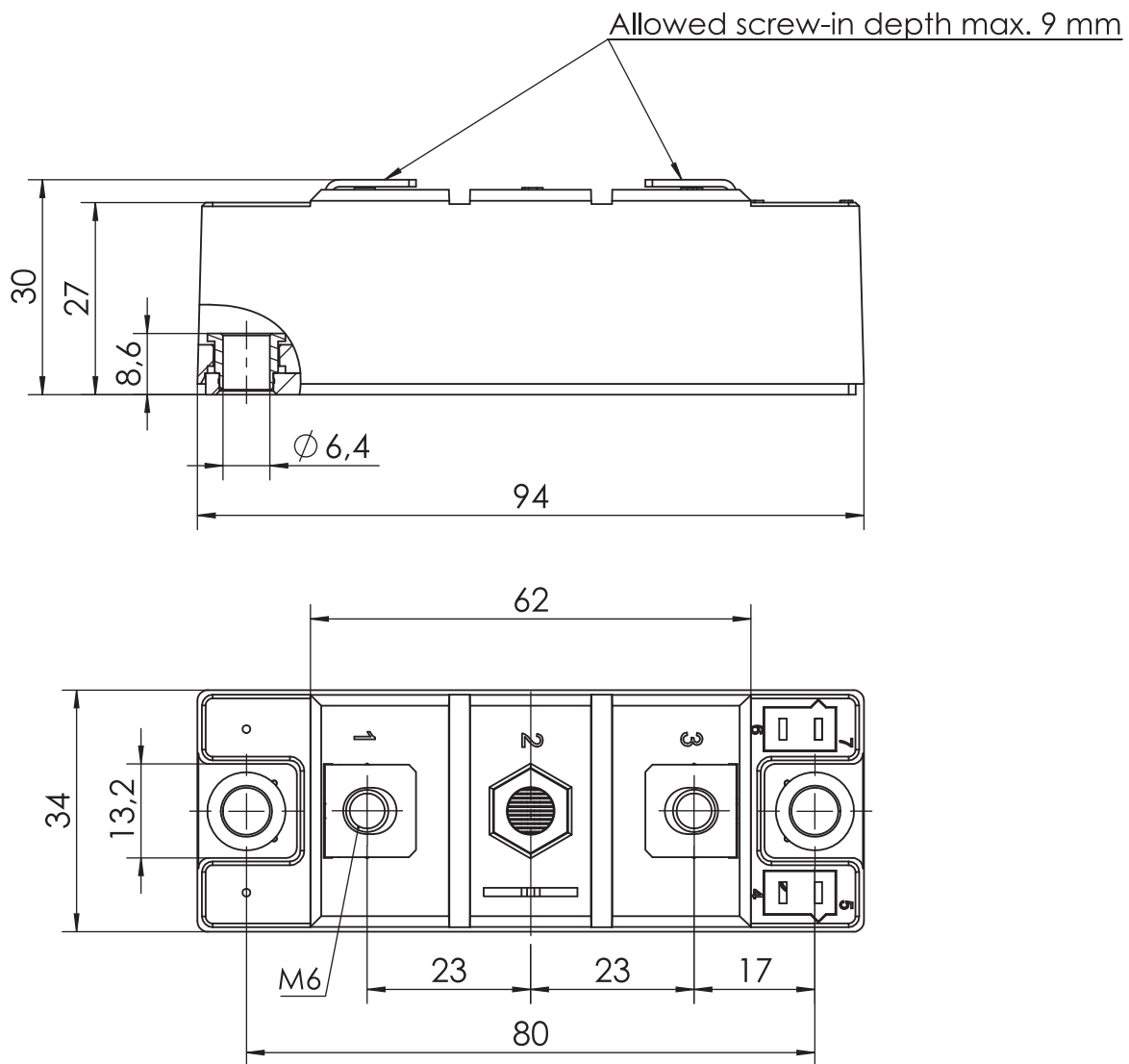


Fig. 16: Surge overload current vs. time

DIMENSIONS



General tolerance ± 0.5 mm

TOPOLOGY OF INTERNAL CONNECTION

