



V_{RSM} V	V_{RRM} V	$I_{FRMS} = 310$ A (maximum value for continuous operation) $I_{FAV} = 160$ A (sin. 180; $T_C = 95^\circ\text{C}$)		
900	800	AMKE 81-08		
1300	1200	AMKE 81-12		
1700	1600	AMKE 81-16		

Symbols and parameters			Values	Units
I_{FAV}	Mean forward current	sin 180; $T_C = 85$ (100) $^\circ\text{C}$	82 (57)	A
I_D	Direct output current	P3/120; $T_a = 45^\circ\text{C}$; B2/B6 P3/180F; $T_a = 35^\circ\text{C}$; B2/B6	63 / 70 135 / 175	A A
I_{FSM}	Surge forward current	$T_{vj} = 25^\circ\text{C}$; 10 ms $T_{vj} = 125^\circ\text{C}$; 10 ms	2000 1750	A A
i^2t	i^2t value, rating for fusing	$T_{vj} = 25^\circ\text{C}$; 8.3...10 ms $T_{vj} = 125^\circ\text{C}$; 8.3...10 ms	20000 15000	A^2s A^2s
V_F	Forward voltage	$T_{vj} = 25^\circ\text{C}$; $I_F = 300$ A	max. 1.55	V
$V_{(TO)}$	On-state threshold voltage	$T_{vj} = 125^\circ\text{C}$	max. 0.85	V
r_T	On-state slope resistance	$T_{vj} = 125^\circ\text{C}$	max. 1.8	$\text{m}\Omega$
I_{RD}	Direct reverse current	$T_{vj} = 125^\circ\text{C}$; $V_{RD} = V_{RRM}$	max. 4.5	mA
$R_{th(j-c)}$	Thermal resistance, junction to case	per diode / per module	0.4	K/W
$R_{th(c-s)}$	Thermal resistance, junction to heatsink	per diode / per module	0.2	K/W
T_{vj}	(Virtual) junction temperature		-40 ... +125	$^\circ\text{C}$
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. a.c. 50 Hz; r.m.s.; 1s / 1min. for AMK ... H4	3600 / 3000 4800 / 4000	$\text{V}\sim$ $\text{V}\sim$
M_s	Mounting torque on heatsink		$5 \pm 15\%$	Nm
M_t	Mounting torque for terminals		$3 \pm 15\%$	Nm
a	Maximum allowable acceleration		$5 \cdot 9.81$	m/s^2
W	Weight		95	g



