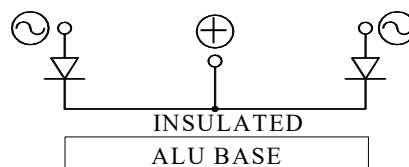


MM300.02IS

INSULATED FAST RECOVERY DIODE MODULE

Output Current **300 A**

Blocking Voltage **200 V**



V_{RRM} [V]	V_{RSM} [V]	V_{OUT} [V]	P/N
200	300	65	MM300.02IS

Features

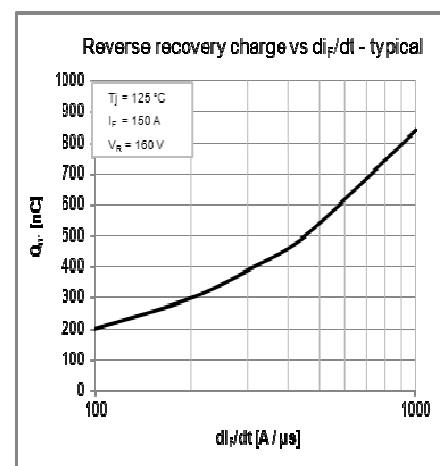
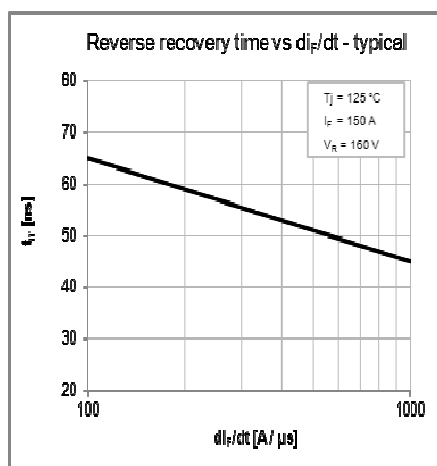
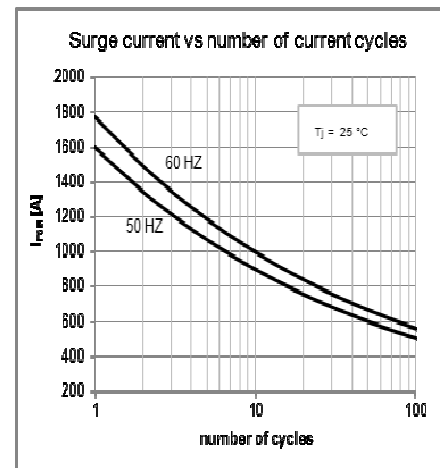
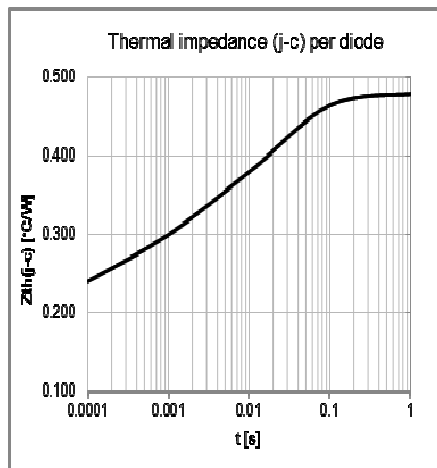
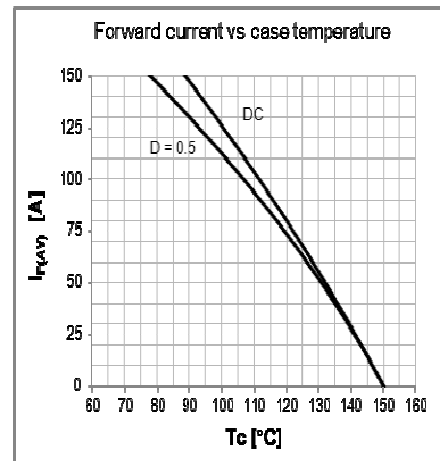
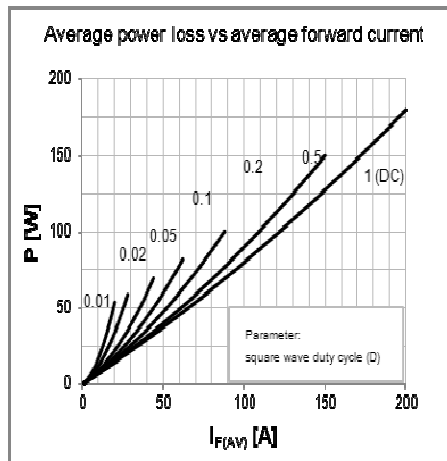
Short recovery time
Low switching losses
Soft recovery behavior
Electrically insulated case

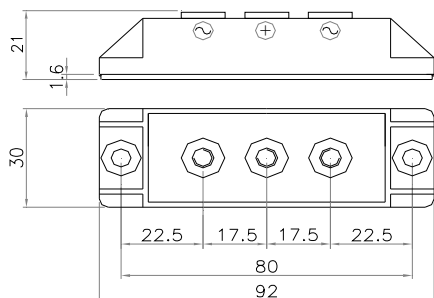
Applications

Antiparallel diode for high frequency switching devices
Free-wheeling diode in converters or motor controllers
Uninterruptible power supplies (UPS)
Ultrasonic cleaners and welders

Diodes characteristics		Conditions	T_j [°C]	Value
$I_{F(AV)}$	Average forward current	$T_c = 78^\circ\text{C}$		150 A
I_{FRM}	Repetitive forward current, max	Square wave, 20 kHz		300 A
I_{RRM}	Max repetitive peak reverse current	$V = V_{RRM}$	150	2 mA
$V_{F(TO)}$	Threshold voltage		150	0,7 V
r_F	Forward slope resistance		150	1,0 m Ω
V_{FM}	Peak forward voltage, max	$I_F = 150$ A	150	1,0 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	25	1600 A
I^2t	Max I^2t for fusing		25	12800 A ² s
C_T	Junction capacitance, typ	$V = V_{RRM}$	25	180 pF
Q_{rr}	Reverse recovery charge, typ	$I_F = 150$ A	125	300 nC
I_{rr}	Reverse recovery current, typ	$V_R = 160$ V		9 A
t_{rr}	Reverse recovery time, typ	$di_F / dt = 200$ A / μs		58 ns
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)			0,48 °C/W

Module characteristics		Conditions	Value
I_{OUT}	Output current (center tap connection)	$T_c = 78^\circ\text{C}$	300 A
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 1$ s ($i < 1$ mA)	3600 V
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 60$ s ($i < 1$ mA)	3000 V
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,100 °C/W
T_{stg}	Max storage temperature		150 °C
W	Weight		115 g
M_1	Mounting torque, ± 15 %		5,5 N·m
			48 lb·inch
M_2	Terminal connection torque, ± 15 %		4,0 N·m
			35 lb·inch

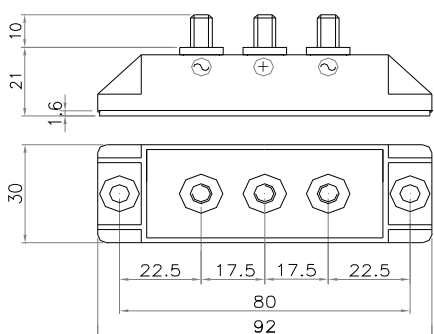



Fig.1 MM300.02IS-SS6-FIX5-HP-P80-TA

Code:MM50003000009

MM-300.02IS-SS5-FIX5-HP-P80-TA

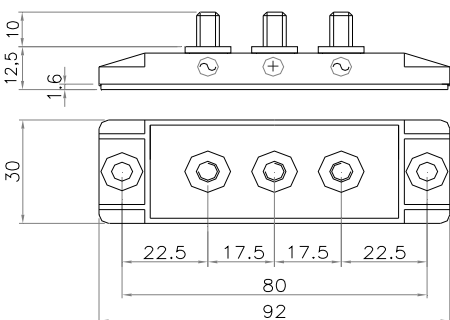
Code:MM50003000008


Fig.2 MM300.02IS-MM6x10-FIX5-HP-P80-TA

Code:MM50003000005

MM300.02IS-MM5x10-FIX5-HP-P80-TA

Code:MM50003000001


Fig.3 MM300.02IS-MM6x10-FIX5-LP-P80-TA

Code:MM50003000004

MM300.02ISMM5x10-FIX5-LP-P80-TA

Code:MM50003000000

Power fix:
SS=Screw (M6 or M5)
MM=Bolt (M6 or M5)

Mounting fix:
FIX= Ø5,5

Profile:
HP=High Profile LP=Low Profile

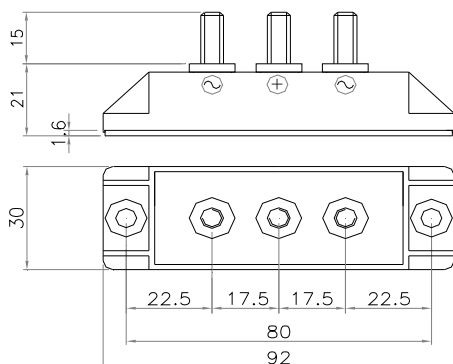


Fig.4 MM300.02IS-MM6x15-FIX5-HP-P80-TA

Code:MM50003000007

MM300.02IS-MM5x15-FIX5-HP-P80-TA

Code:MM50003000003

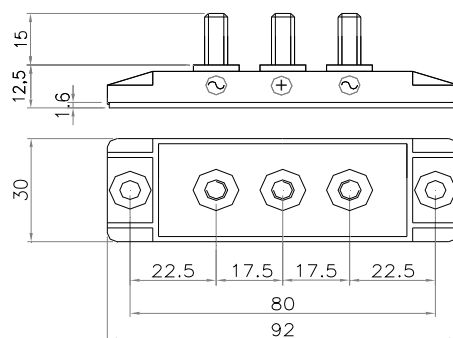


Fig.5 MM300.02IS-MM6x15-FIX5-LP-P80-TA

Code:MM50003000006

MM300.02IS-MM5x15-FIX5-LP-P80-TA

Code:MM50003000002

Power fix:

SS=Screw (M6 or M5)

MM=Bolt (M6 or M5)

Mounting fix:

FIX= Ø5,5

Profile:

HP=High Profile LP=Low Profile