

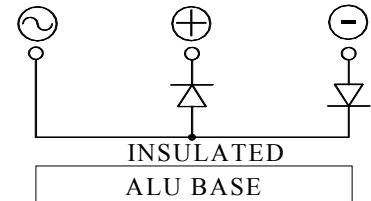


HBS200.16

INSULATED DIODE MODULE

Output Current **200 A**

Blocking Voltage **1600 V**



V_{RRM} [V]	V_{RSM} [V]	P/N
1600	1700	HBS200.16

Features

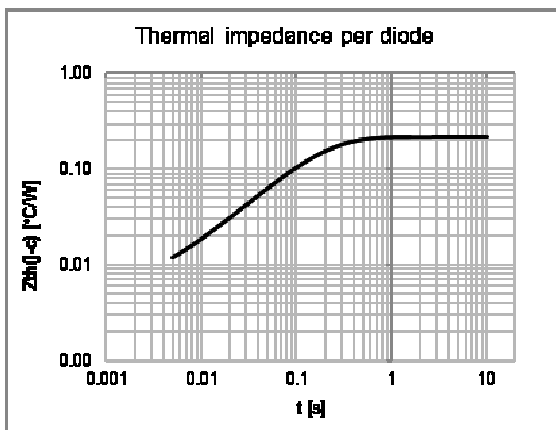
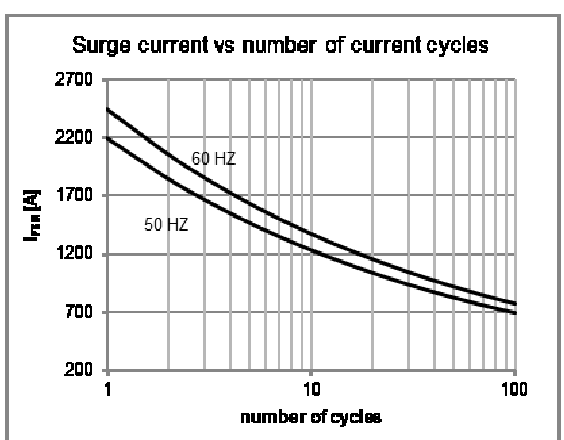
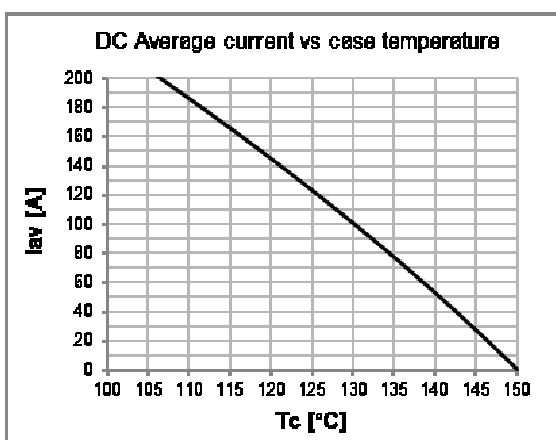
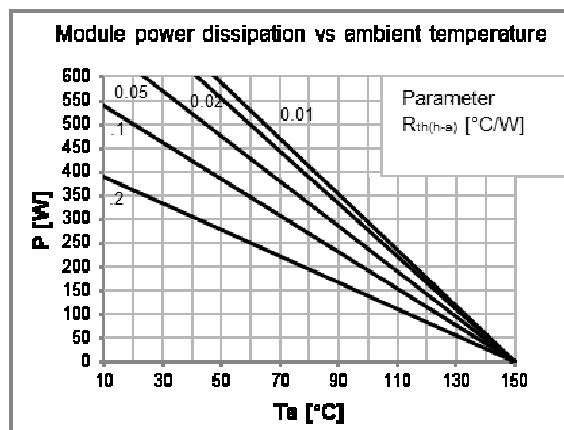
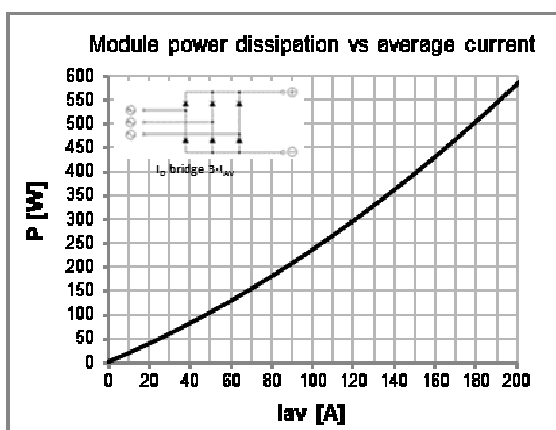
Low forward voltage diodes for high surge capability
Low thermal impedance packaging
Electrically insulated case

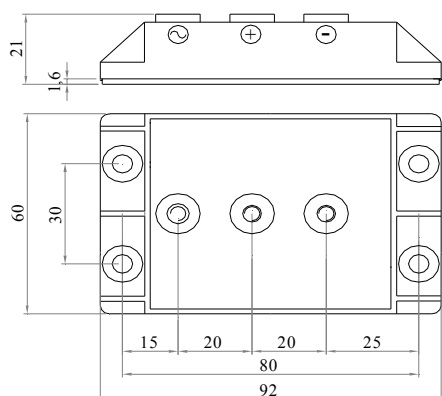
Applications

Input rectifier for variable frequency drives
Battery charger rectifiers
Three phase rectifier for power supplies
Rectifiers for DC motor fields supplies

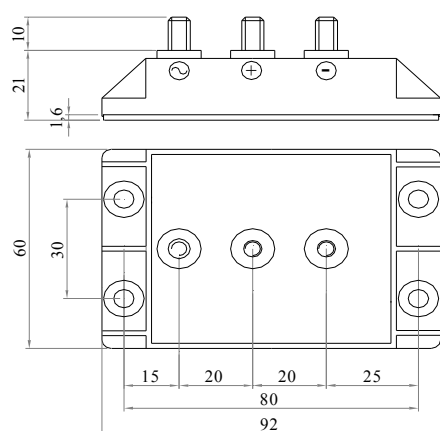
Diodes characteristics		Conditions	T_j [°C]	Value
I_{RRM}	Max repetitive peak reverse current	$V = V_{RRM}$	150	8 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	0,93 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 200A$	25	1 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	2200 A
I^2t	Max I^2t for fusing		150	24200 A ² s
$I_{F(AV)}$	Average forward current	$T_c = 107^\circ\text{C} - \text{DC}$		200 A
$I_{F(AV)}$	Average forward current	$T_c = 110^\circ\text{C} - \text{in three phase bridge configuration}$		140 A
$I_{F(AV)}$	Average forward current	$T_c = 110^\circ\text{C} - \text{in single phase bridge configuration}$		146 A
T_{jmax}	Operating junction temperature			150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		0,20 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 120° conduction		0,22 °C/W

Module characteristics		Conditions	Value
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 1\text{ s}$ ($i < 1\text{ mA}$)	3600 V
V_{INS}	RMS Insulating voltage	50 / 60 Hz $t = 60\text{ s}$ ($i < 1\text{ mA}$)	3000 V
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation	0,100 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 120° conduction	0,110 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,050 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	7,0 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 mm	2,5 °C/W
T_{stg}	Max storage temperature		150 °C
M_1	Mounting torque, $\pm 15\%$		4,5 N·m 40 lb·inch
M_2	Terminal connection torque, $\pm 15\%$		3,0 N·m 26 lb·inch

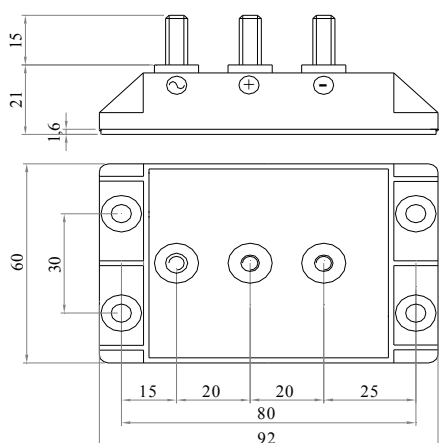



Fig.1 HBS200.16-SS6-FIX5-HP-P80-TA

Code:HB90002000000


Fig.2 HBS200.16-MM6x10-FIX5-HP-P80-TA

Code:HB90002000001


Fig.3 HBS200.16-MM6x15-FIX5-HP-P80-TA

Code:HB90002000002

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

Mounting fix:
FIX= Ø5,5

Profile:
HP=High Profile