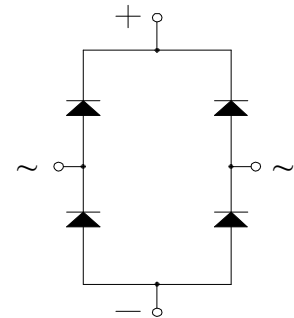




## BF100.06

### POWER RECTIFIER BRIDGE

Output Current **100 A**



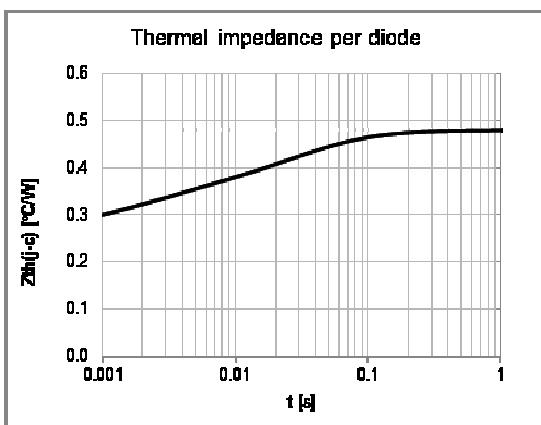
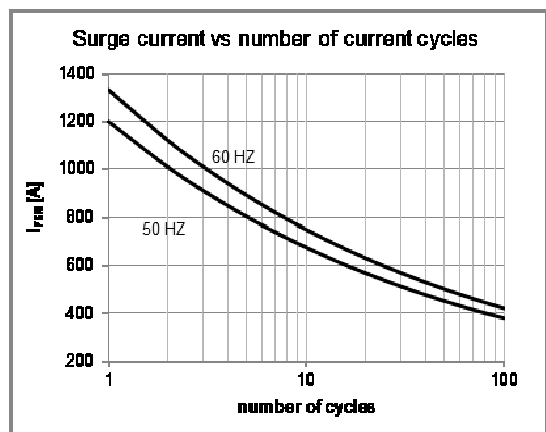
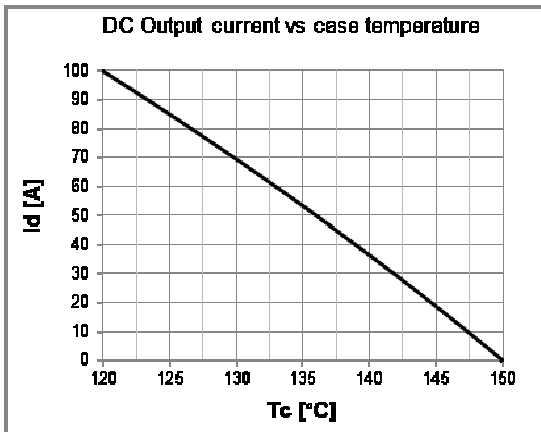
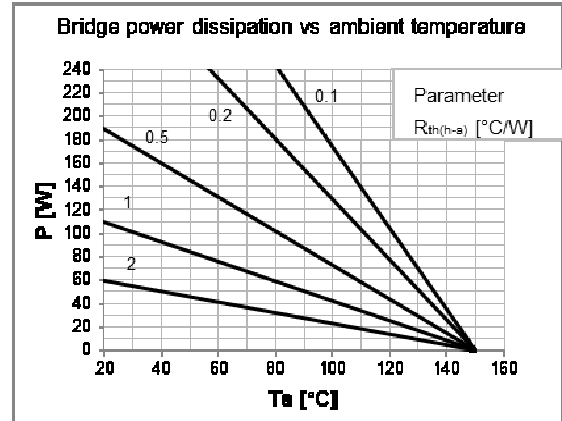
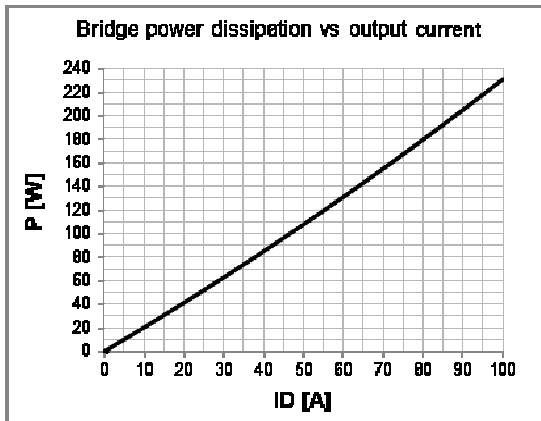
$V_{RRM}$	$V_{RSM}$	P/N
600	700	BF100.06

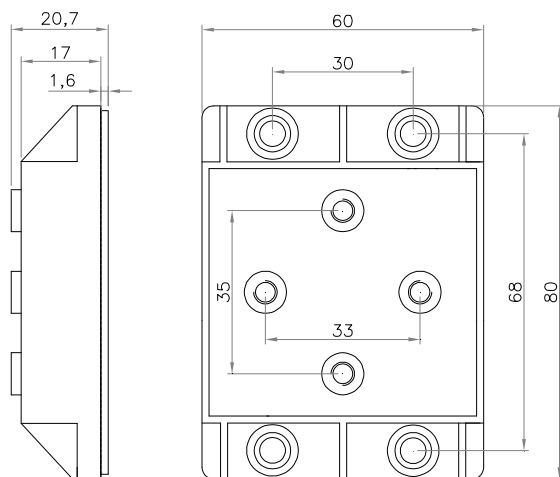
**Features**  
 Low forward voltage diodes for high surge capability  
 Low thermal impedance packaging  
 Electrically insulated case

**Applications**  
 High frequency applicatin  
 Battery charger rectifiers  
 Single phase rectifier for power supplies  
 Rectifiers for DC motor fields supplies

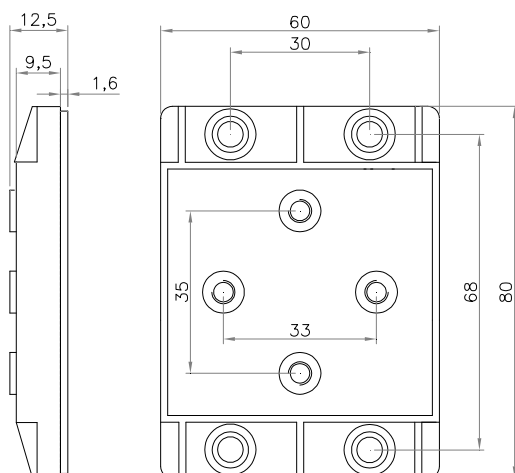
Diodes characteristics		Conditions	$T_j$ [°C]	Value
$I_{RRM}$	Max repetitive peak reverse current	$V = V_{RRM}$	150	4 mA
$V_{F(TO)}$	Threshold voltage		150	1,0 V
$r_F$	Forward slope resistance		150	1,3 mΩ
$V_{FM}$	Peak forward voltage, max	$I_F = 150A$	150	1,1 V
$I_{FSM}$	Surge forward current	Half sine wave, 10 ms	150	1200 A
$I^2t$	Max $I^2t$ for fusing		150	7200 A <sup>2</sup> s
$T_{jmax}$	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		0,48 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 180° conduction		0,52 °C/W

Module characteristics		Conditions	Value
$I_D$	DC output current	$T_c = 120$ °C	100 A
$I_D$	DC output current	$T_a = 40$ °C ; freely suspended	8 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
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation	0,120 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,130 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,058 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	8,5 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 mm	3,5 °C/W
$T_{stg}$	Max storage temperature		150 °C
$M_1$	Mounting torque, ± 15 %		4,5 N·m 40 lb·inch
$M_2$	Terminal connection torque, ± 15 %		3,0 N·m 26 lb·inch



**Fig.1**

**BF100.06-SS5-FIX5-HP-P68-TA**  
Code:BF80001000002

**Fig.2**

**BF100.06-SS5-FIX5-LP-P68-TA**  
Code:BF80001000003

**Power fix:**

SS=Screw (M5)

**Mounting fix:**

FIX= Ø5,5