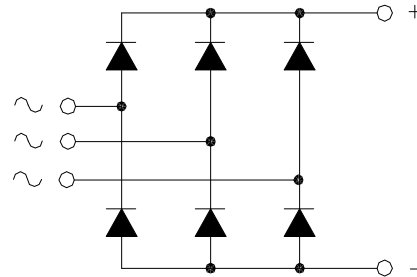




DBM130

POWER RECTIFIER BRIDGE

Output Current **130 A**



V_{RRM}	V_{RSM}	P/N
400	500	DBM130.04
600	700	DBM130.06
800	900	DBM130.08
1200	1300	DBM130.12
1600	1700	DBM130.16

Features

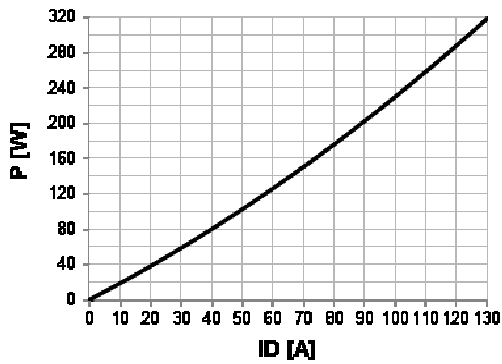
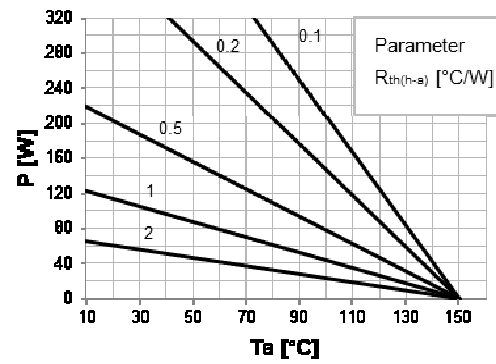
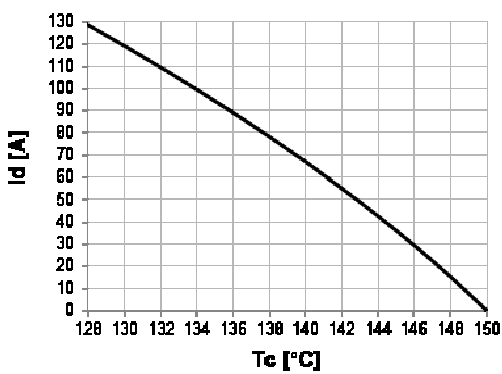
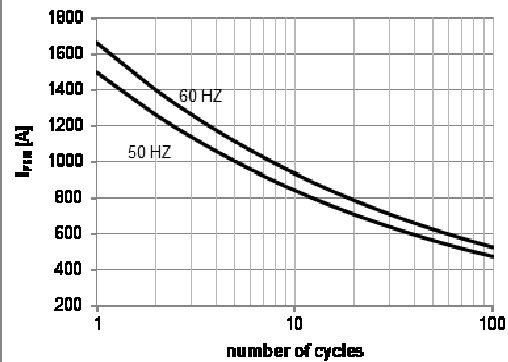
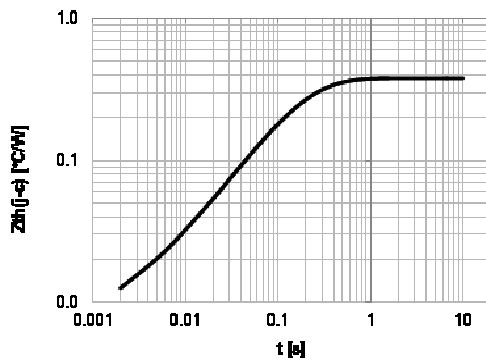
Low forward voltage diodes for high surge capability
Low thermal impedance packaging
Electrically insulated case

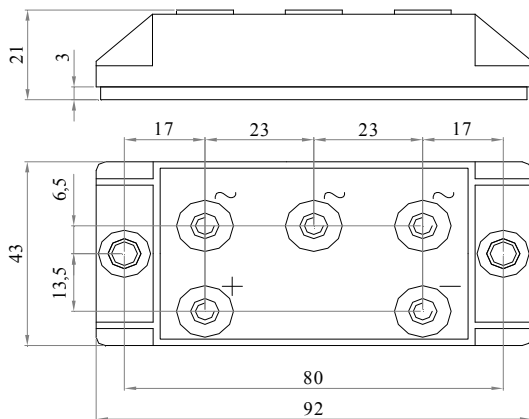
Applications

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	5 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	2,5 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 130$ A	25	1,25 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	1500 A
I^2t	Max I^2t for fusing		150	11250 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		0,38 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 120° conduction		0,42 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 128$ °C	130 A
I_D	DC output current	$T_a = 40$ °C ; freely suspended	10 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	0,063 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 120° conduction	0,070 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,070 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	9,0 °C/W
$R_{th(j-a)}$	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 mm	3,0 °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

Bridge power dissipation vs output current

Bridge power dissipation vs ambient temperature

DC Output current vs case temperature

Surge current vs number of current cycles

Thermal impedance per diode


**Fig.1****DBM130.04-SS6-FIX5-HP-P80-TB**

Code:DBM70001300005

DBM130.06-SS6-FIX5-HP-P80-TB

Code:DBM70001300017

DBM130.08-SS6-FIX5-HP-P80-TB

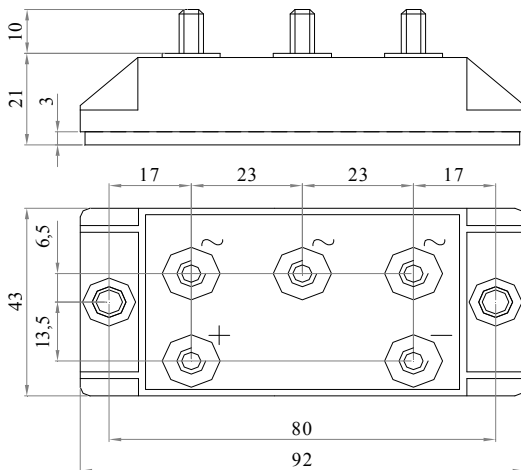
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DBM130.12-SS6-FIX5-HP-P80-TB

Code:DBM70001300041

DBM130.16-SS6-FIX5-HP-P80-TB

Code:DBM70001300053

**Fig.2****DBM130.04-MM6x10-FIX5-HP-P80-TB**

Code:DBM70001300001

DBM130.06-MM6x10-FIX5-HP-P80-TB

Code:DBM70001300013

DBM130.08-MM6x10-FIX5-HP-P80-TB

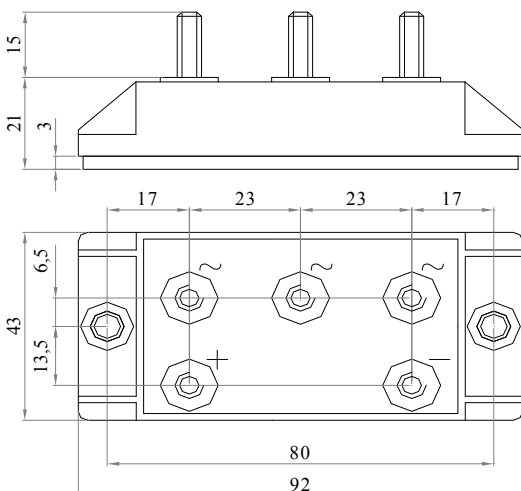
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DBM130.12-MM6x10-FIX5-HP-P80-TB

Code:DBM70001300037

DBM130.16-MM6x10-FIX5-HP-P80-TB

Code:DBM70001300049

**Fig.3****DBM130.04-MM6x15-FIX5-HP-P80-TB**

Code:DBM70001300003

DBM130.06-MM6x15-FIX5-HP-P80-TB

Code:DBM70001300015

DBM130.08-MM6x15-FIX5-HP-P80-TB

Code:DBM70001300027

DBM130.12-MM6x15-FIX5-HP-P80-TB

Code:DBM70001300039

DBM130.16-MM6x15-FIX5-HP-P80-TB

Code:DBM70001300051

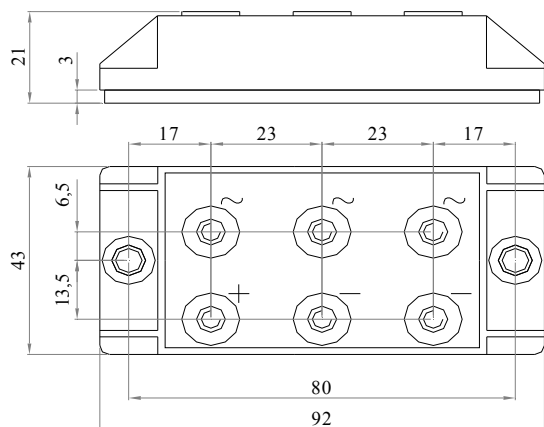
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V**Power fix:**

SS=Screw (M6)

MM=Bolt (M6)

Mounting fix:

FIX= Ø5,5


Fig.4
DBM130.04-SS6-FIX5-HP-P80-TC

Code:DBM70001300011

DBM130.06-SS6-FIX5-HP-P80-TC

Code:DBM70001300023

DBM130.08-SS6-FIX5-HP-P80-TC

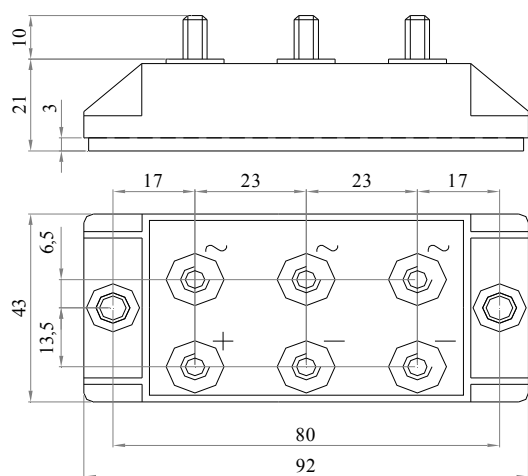
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DBM130.12-SS6-FIX5-HP-P80-TC

Code:DBM70001300047

DBM130.16-SS6-FIX5-HP-P80-TC

Code:DBM70001300059


Fig.5
DBM130.04-MM6x10-FIX5-HP-P80-TC

Code:DBM70001300007

DBM130.06-MM6x10-FIX5-HP-P80-TC

Code:DBM70001300019

DBM130.08-MM6x10-FIX5-HP-P80-TC

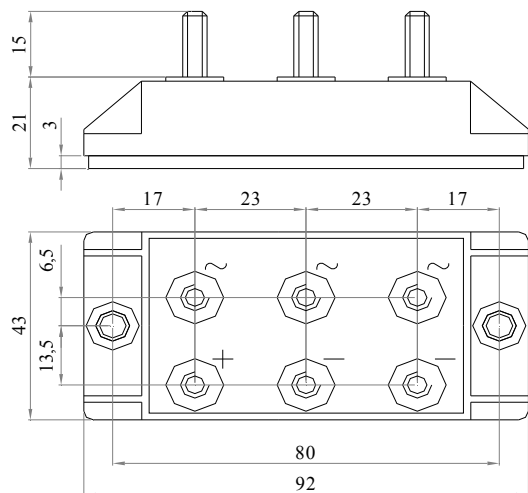
Code:DBM70001300031

DBM130.12-MM6x10-FIX5-HP-P80-TC

Code:DBM70001300043

DBM130.16-MM6x10-FIX5-HP-P80-TC

Code:DBM70001300055


Fig.6
DBM130.04-MM6x15-FIX5-HP-P80-TC

Code:DBM70001300009

DBM130.06-MM6x15-FIX5-HP-P80-TC

Code:DBM70001300021

DBM130.08-MM6x15-FIX5-HP-P80-TC

Code:DBM70001300033

DBM130.12-MM6x15-FIX5-HP-P80-TC

Code:DBM70001300045

DBM130.16-MM6x15-FIX5-HP-P80-TC

Code:DBM70001300057

Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V
Power fix:

SS=Screw (M6)

MM=Bolt (M6)

Mounting fix:

FIX= Ø5,5