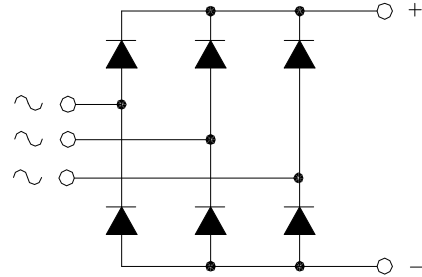


MTS130

POWER RECTIFIER BRIDGE

Output Current **130 A**



V_{RRM}	V_{RSM}	P/N
400	500	MTS130.04
600	700	MTS130.06
800	900	MTS130.08
1200	1300	MTS130.12
1600	1700	MTS130.16

Features

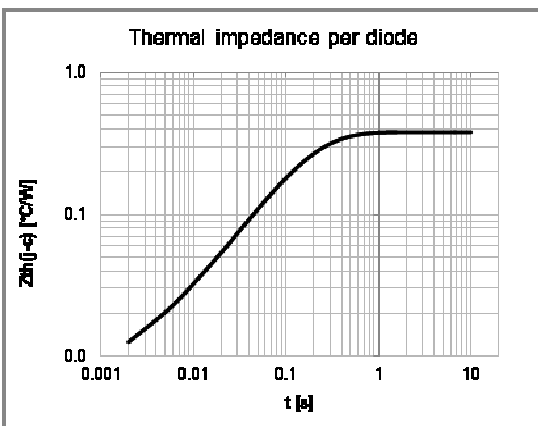
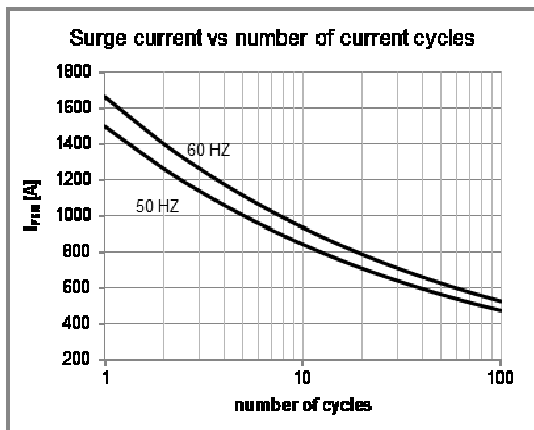
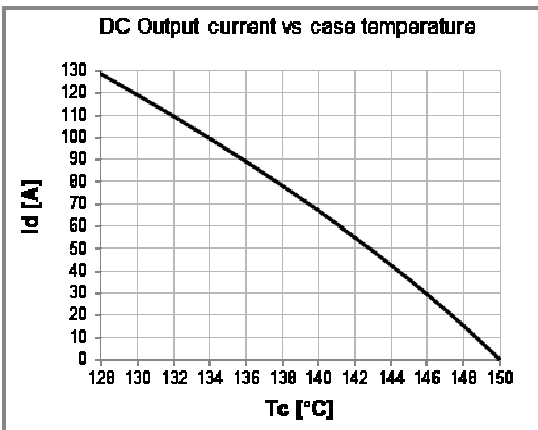
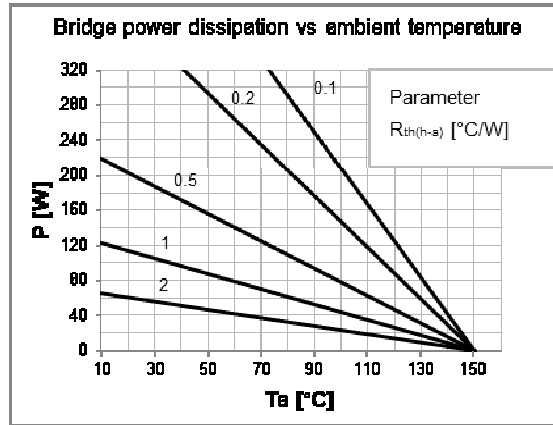
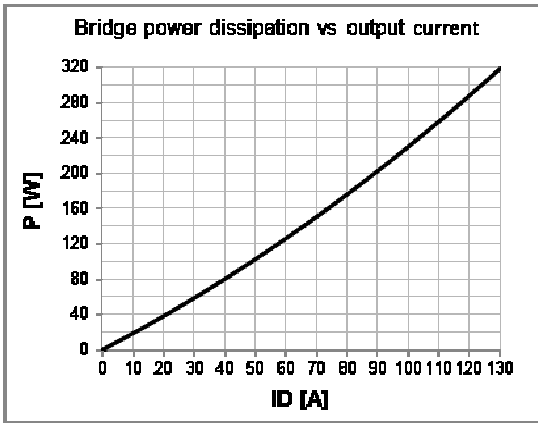
- Low forward voltage diodes for high surge capability
- Low thermal impedance packaging
- Electrically insulated case

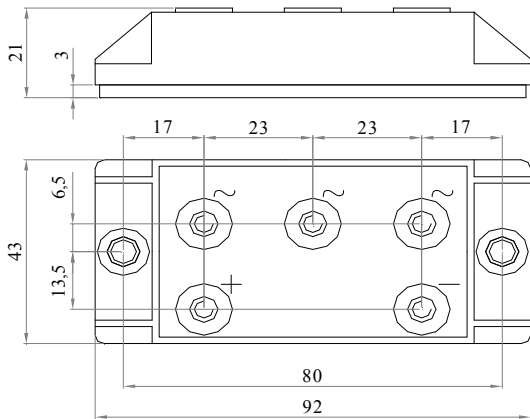
Applications

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

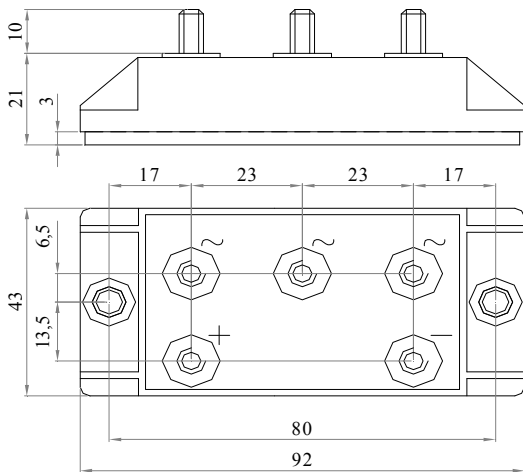
Diodes characteristics		Conditions	T_j [°C]	Value
I_{RRM}	Max repetitive peak reverse current	$V = V_{RRM}$	150	5 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	2,5 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 130$ A	25	1,25 V
I_{FSM}	Surge forward current	Half sine wave, 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

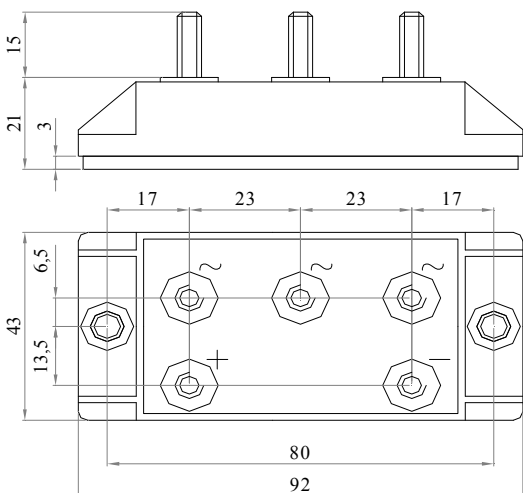



Fig.1

MTS130.04-SS6-FIX5-HP-P80-TB
 Code:970001300005
 MTS130.06-SS6-FIX5-HP-P80-TB
 Code:970001300017
 MTS130.08-SS6-FIX5-HP-P80-TB
 Code:970001300029
 MTS130.12-SS6-FIX5-HP-P80-TB
 Code:970001300041
 MTS130.16-SS6-FIX5-HP-P80-TB
 Code:970001300053


Fig.2

MTS130.04-MM6x10-FIX5-HP-P80-TB
 Code:970001300001
 MTS130.06-MM6x10-FIX5-HP-P80-TB
 Code:970001300013
 MTS130.08-MM6x10-FIX5-HP-P80-TB
 Code:970001300025
 MTS130.12-MM6x10-FIX5-HP-P80-TB
 Code:970001300037
 MTS130.16-MM6x10-FIX5-HP-P80-TB
 Code:970001300049

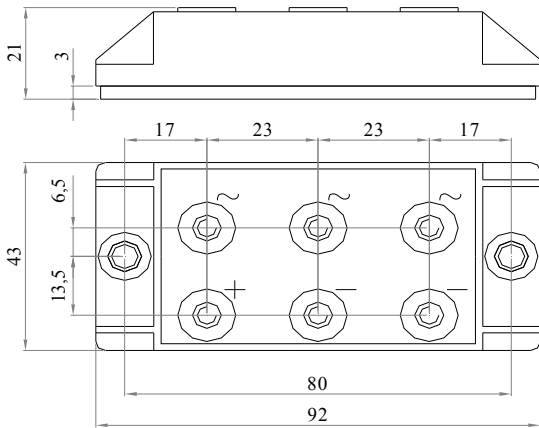

Fig.3

MTS130.04-MM6x15-FIX5-HP-P80-TB
 Code:970001300003
 MTS130.06-MM6x15-FIX5-HP-P80-TB
 Code:970001300015
 MTS130.08-MM6x15-FIX5-HP-P80-TB
 Code:970001300027
 MTS130.12-MM6x15-FIX5-HP-P80-TB
 Code:970001300039
 MTS130.16-MM6x15-FIX5-HP-P80-TB
 Code:970001300051

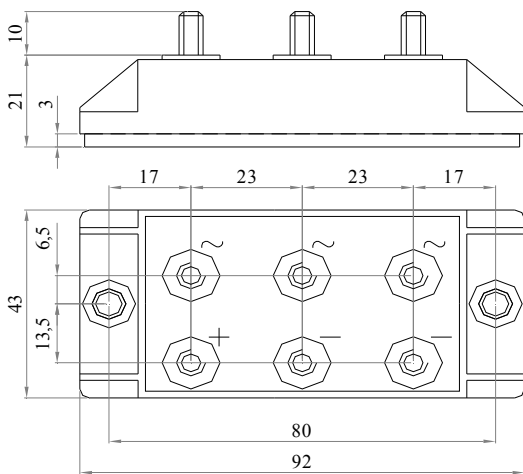
Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V

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

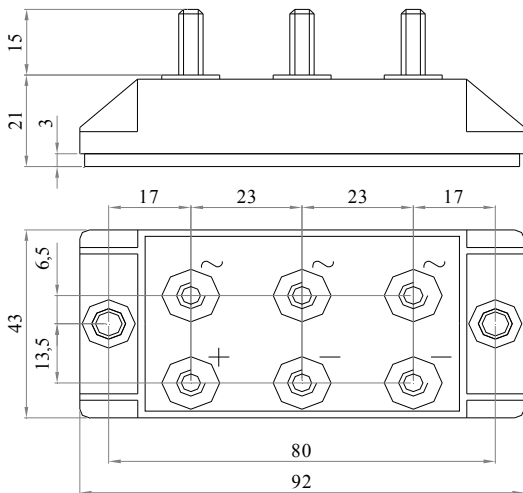
Mounting fix:
 FIX= \varnothing 5,5


Fig.4

MTS130.04-SS6-FIX5-HP-P80-TC
 Code:970001300011
 MTS130.06-SS6-FIX5-HP-P80-TC
 Code:970001300023
 MTS130.08-SS6-FIX5-HP-P80-TC
 Code:970001300035
 MTS130.12-SS6-FIX5-HP-P80-TC
 Code:970001300047
 MTS130.16-SS6-FIX5-HP-P80-TC
 Code:970001300059


Fig.5

MTS130.04-MM6x10-FIX5-HP-P80-TC
 Code:970001300007
 MTS130.06-MM6x10-FIX5-HP-P80-TC
 Code:970001300019
 MTS130.08-MM6x10-FIX5-HP-P80-TC
 Code:970001300031
 MTS130.12-MM6x10-FIX5-HP-P80-TC
 Code:970001300043
 MTS130.16-MM6x10-FIX5-HP-P80-TC
 Code:970001300055


Fig.6

MTS130.04-MM6x15-FIX5-HP-P80-TC
 Code:970001300009
 MTS130.06-MM6x15-FIX5-HP-P80-TC
 Code:970001300021
 MTS130.08-MM6x15-FIX5-HP-P80-TC
 Code:970001300033
 MTS130.12-MM6x15-FIX5-HP-P80-TC
 Code:970001300045
 MTS130.16-MM6x15-FIX5-HP-P80-TC
 Code:970001300057

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

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

Mounting fix:
 FIX= Ø5,5