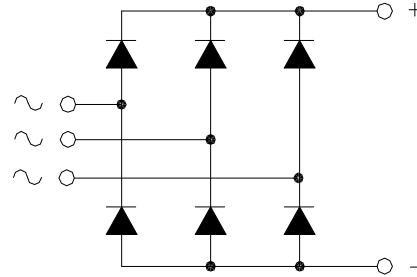


## MTS130

### 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

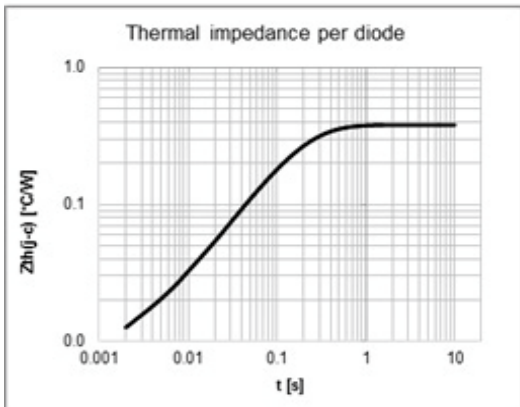
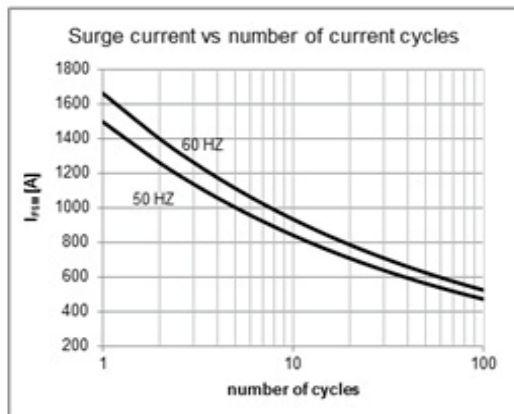
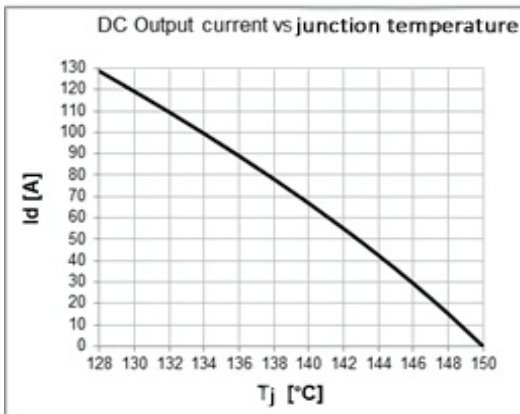
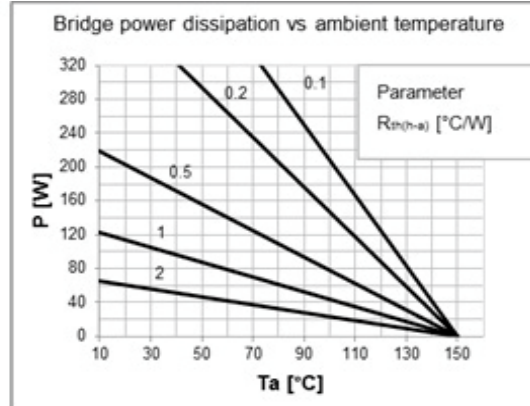
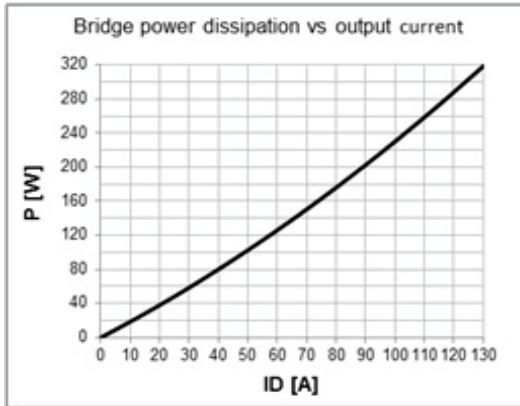
- Low forward voltage diodes for high surge capability
- Low thermal impedance packaging
- Electrically insulated case

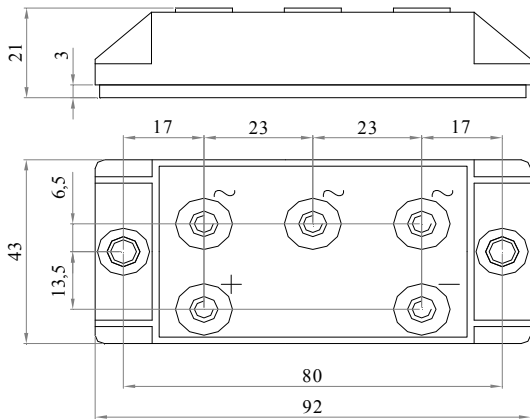
#### Applications

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

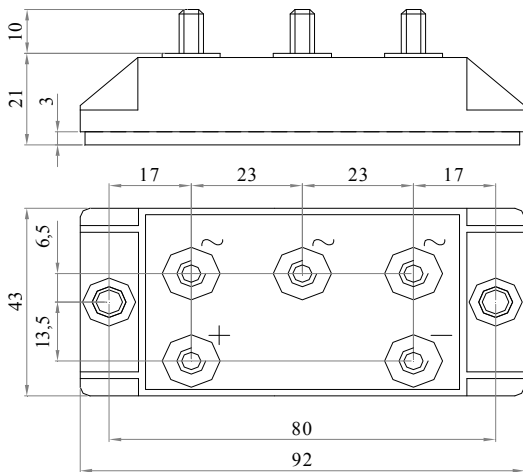
Diodes characteristics		Conditions	$T_j$ [°C]	Value
$I_{RRM}$	Max repetitive peak reverse current	$V = V_{RRM}$	150	5 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
$r_F$	Forward slope resistance		150	2,5 mΩ
$V_{FM}$	Peak forward voltage, max	$I_F = 130$ A	25	1,25 V
$I_{FSM}$	Surge forward current	Half sine wave, 10 ms	150	1500 A
$I^2t$	Max $I^2t$ for fusing		150	11250 A <sup>2</sup> 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

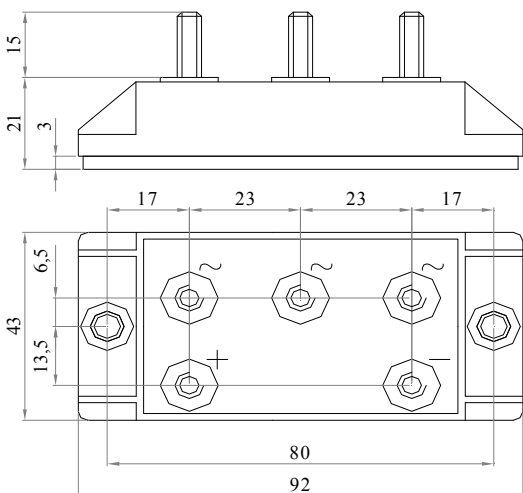



**Fig.1**

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

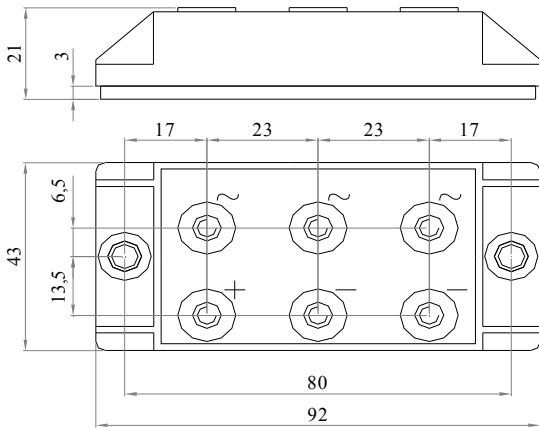

**Fig.3**

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

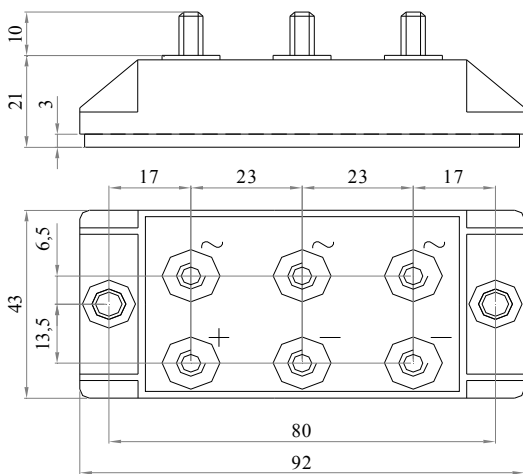
**Voltage:04=400V 06=600V 08=800V 12=1200V 16=1600V**

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

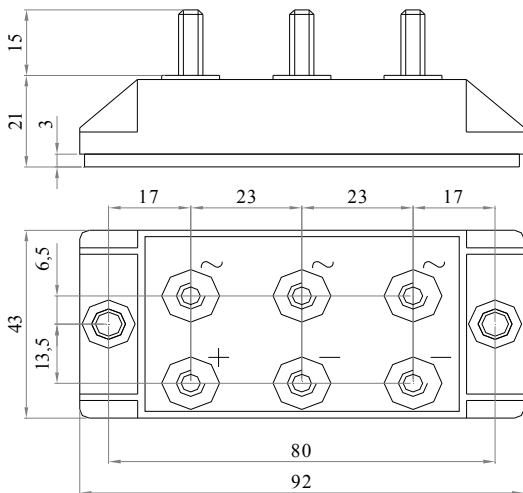
**Mounting fix:**  
 FIX=  $\varnothing$ 5,5


**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