



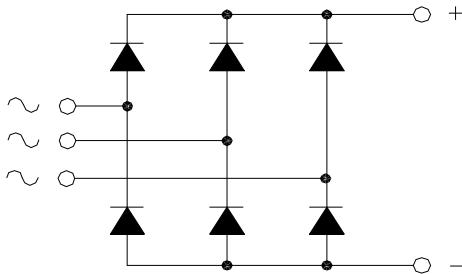
# SCOMES

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## MTS75

### POWER RECTIFIER BRIDGE

Output Current      **75 A**



#### Features

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

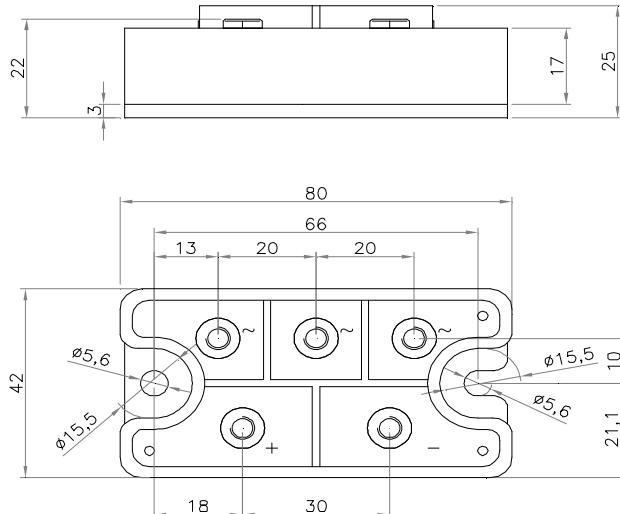
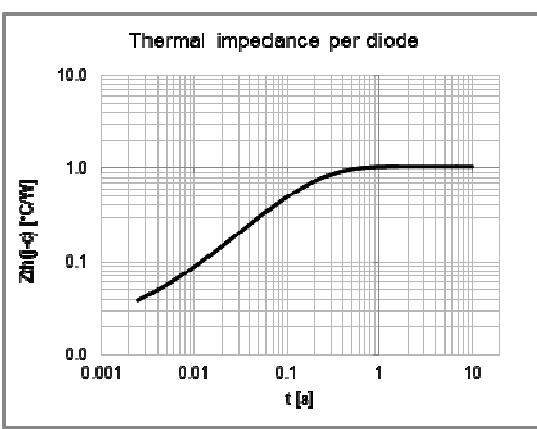
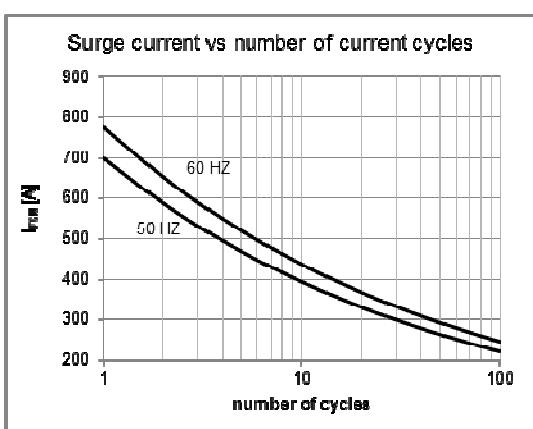
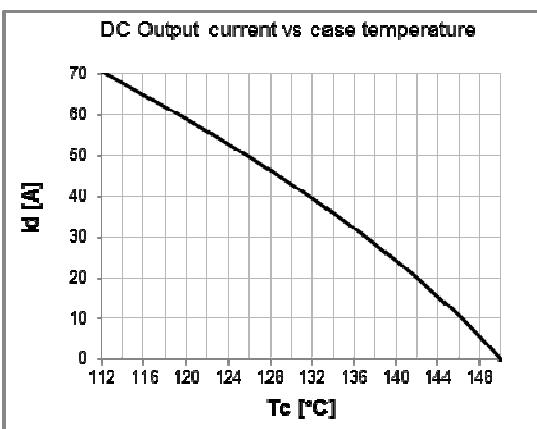
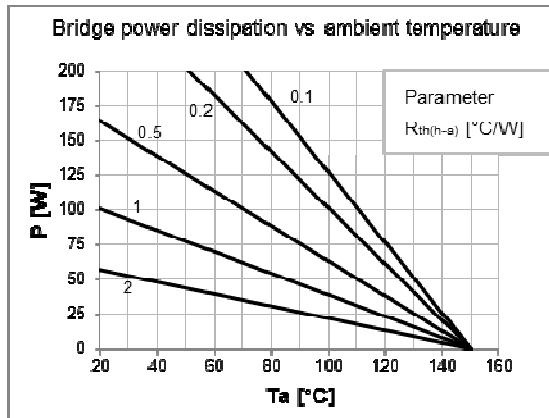
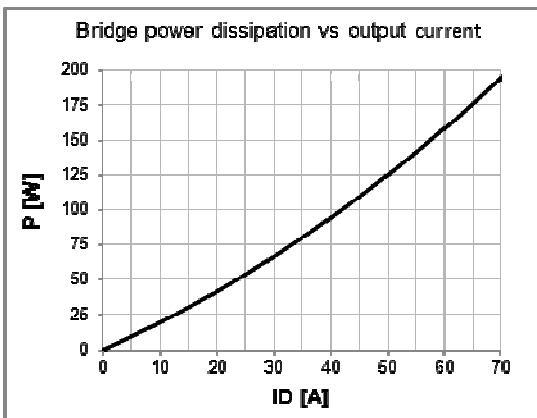
#### Applications

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

V <sub>RRM</sub>	V <sub>RSM</sub>	P/N
400	500	MTS75.04
800	900	MTS75.08
1200	1300	MTS75.12
1400	1500	MTS75.14
1600	1700	MTS75.16

Diodes characteristics		Conditions	T <sub>j</sub> [°C]	Value
I <sub>RRM</sub>	Max repetitive peak reverse current	V = V <sub>RRM</sub>	150	4 mA
V <sub>F(TO)</sub>	Threshold voltage		150	0,9 V
r <sub>F</sub>	Forward slope resistance		150	7,0 mΩ
V <sub>FM</sub>	Peak forward voltage, max	I <sub>F</sub> = 100A	25	1,5 V
I <sub>FSM</sub>	Surge forward current	Half sine wave, 10 ms	150	700 A
I <sub>2t</sub>	Max I <sub>2t</sub> for fusing		150	2450 A <sup>2</sup> s
T <sub>jmax</sub>	Operating junction temperature			-40 / 150 °C
R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	DC operation		1,04 °C/W
R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	Rectangular wave 180° conduction		1,16 °C/W

Module characteristics		Conditions	Value
I <sub>b</sub>	DC output current	T <sub>c</sub> = 95 °C	75 A
I <sub>b</sub>	DC output current	T <sub>a</sub> = 40 °C ; freely suspended	5 A
V <sub>INS</sub>	RMS Insulating voltage	50 / 60 Hz t = 1 s ( i < 1 mA)	3600 V
V <sub>INS</sub>	RMS Insulating voltage	50 / 60 Hz t = 60 s ( i < 1 mA)	3000 V
R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	DC operation	0,261 °C/W
R <sub>th(j-c)</sub>	Thermal resistance (junction to case)	Rect. wave 180° conduction	0,290 °C/W
R <sub>th(c-h)</sub>	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,115 °C/W
R <sub>th(j-a)</sub>	Thermal resistance (junction to ambient)	Freely suspended or mounted on an insulator	9,0 °C/W
R <sub>th(j-a)</sub>	Thermal resistance (junction to ambient)	Mounted on a painted metal sheet 250x250x1 BM	3,8 °C/W
T <sub>stg</sub>	Max storage temperature		150 °C
W	Weight		137 g
M <sub>1</sub>	Mounting torque, ± 15 %		4,5 N·m
M <sub>2</sub>	Terminal connection torque, ± 15 %		3,0 N·m
			26 lb·inch


**Fig.1** MTS75.04-SS5-FIX5-HP-P66-TI

Code:970000750000

MTS75.06-SS5-FIX5-HP-P66-TI

Code:970000750001

MTS75.08-SS5-FIX5-HP-P66-TI

Code:970000750002

MTS75.12-SS5-FIX5-HP-P66-TI

Code:970000750003

MTS75.16-SS5-FIX5-HP-P66-TI

Code:970000750004

**Voltage:**04=400V 08=800V 12=1200V 14=1400V 16=1600V

**Power fix:**

SS=Screw (M5)

**Mounting fix:**

FIX= Ø5,5