



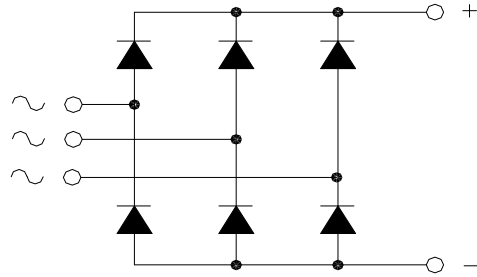
RADDITAL

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DBM50-HM

POWER RECTIFIER BRIDGE

Output Current **50 A**



V_{RRM}	V_{RSM}	P/N
400	500	DBM50.04
600	700	DBM50.06
800	900	DBM50.08
1200	1300	DBM50.12
1600	1700	DBM50.16

Features

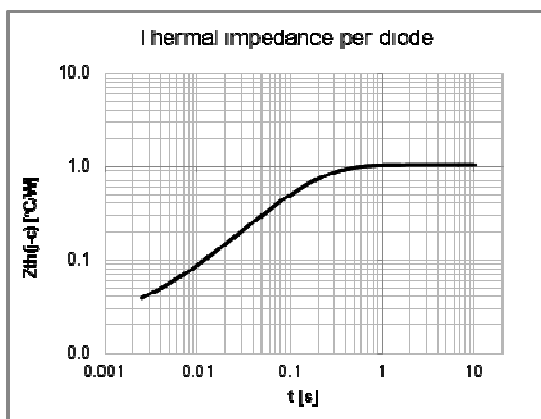
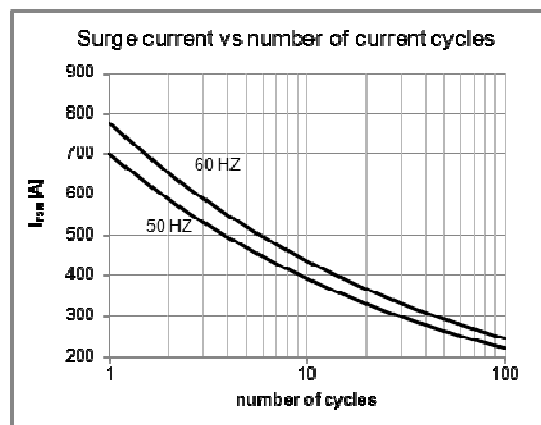
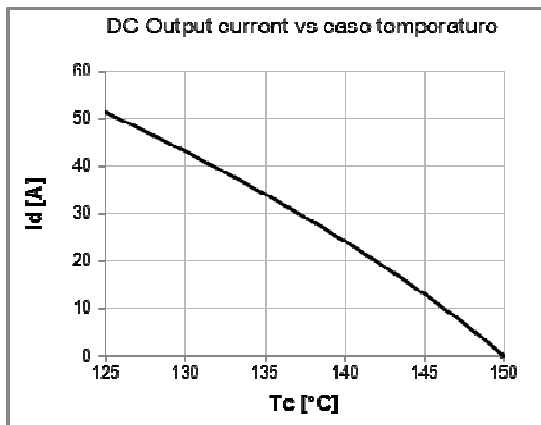
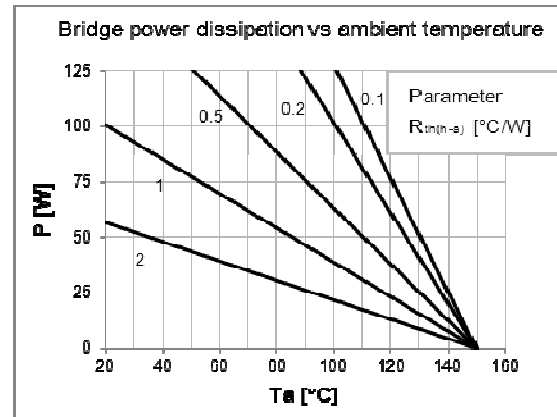
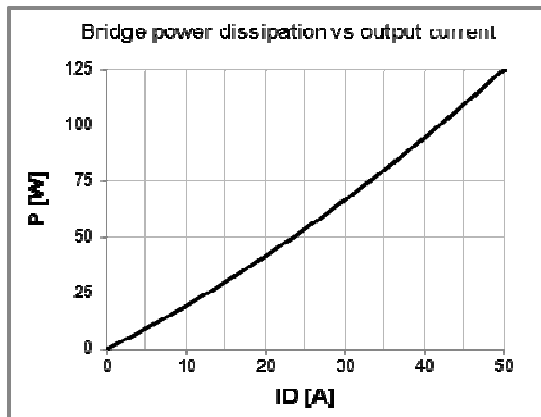
Low forward voltage diodes for high surge capability
Low thermal impedance packaging
Electrically insulated case

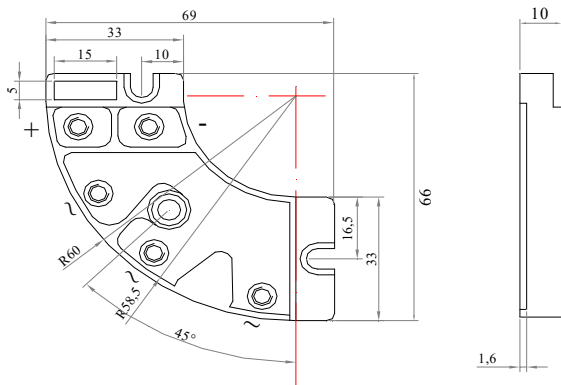
Applications

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	4 mA
$V_{F(TO)}$	Threshold voltage		150	0,9 V
r_F	Forward slope resistance		150	7,0 mΩ
V_{FM}	Peak forward voltage, max	$I_F = 100A$	25	1,7 V
I_{FSM}	Surge forward current	Half sine wave, 10 ms	150	700 A
I^2t	Max I^2t for fusing		150	2450 A ² s
T_{jmax}	Operating junction temperature			-40 / 150 °C
$R_{th(j-c)}$	Thermal resistance (junction to case)	DC operation		1,04 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rectangular wave 120° conduction		1,16 °C/W

Module characteristics		Conditions	Value
I_D	DC output current	$T_c = 126$ °C	50 A
I_D	DC output current	$T_a = 40$ °C ; freely suspended	6 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	0,174 °C/W
$R_{th(j-c)}$	Thermal resistance (junction to case)	Rect. wave 120° conduction	0,193 °C/W
$R_{th(c-h)}$	Thermal resistance (case to heatsink)	Mounting surface flat, smooth and greased	0,100 °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	3,5 °C/W
T_{stg}	Max storage temperature		150 °C
W	Weight		85 g
M_1	Mounting torque, ± 15 %		3,0 N·m 26 lb·inch
M_2	Terminal connection torque, ± 15 %		3,0 N·m 26 lb·inch




Fig.1
DBM50.04-SS4-FIX5-LP-TG

Code:DBM70000500080

DBM50.06-SS4-FIX5-LP-TG

Code:DBM70000500081

DBM50.08-SS4-FIX5-LP-TG

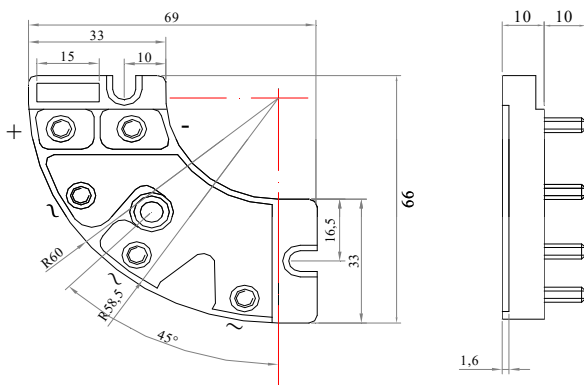
Code:DBM70000500082

DBM50.12-SS4-FIX5-LP-TG

Code:DBM70000500083

DBM50.16-SS4-FIX5-LP-TG

Code:DBM70000500084


Fig.2
DBM50.04-MM4x10-FIX5-LP-TG

Code:DBM70000500085

DBM50.06-MM4x10-FIX5-LP-TG

Code:DBM70000500086

DBM50.08-MM4x10-FIX5-LP-TG

Code:DBM70000500087

DBM50.12-MM4x10-FIX5-LP-TG

Code:DBM70000500088

DBM50.16-MM4x10-FIX5-LP-TG

Code:DBM70000500089

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

SS=Screw (M4)

MM=Bolt (M4)

Mounting fix:

FIX= $\varnothing$ 5,5