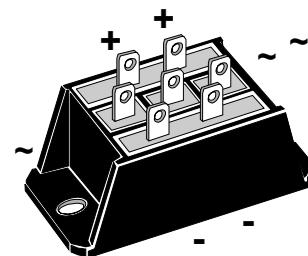
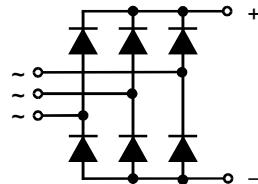


Three Phase Rectifier Bridge

I_{dAV} = 58 A
V_{RRM} = 800-1800 V

V _{RSM} V	V _{RRM} V	Type
900	800	VUO 50-08NO3
1300	1200	VUO 50-12NO3
1500	1400	VUO 50-14NO3
1700	1600	VUO 50-16NO3
1900	1800	VUO 50-18NO3*

* delivery time on request



Symbol	Test Conditions	Maximum Ratings		
I _{dAV} ①	T _c = 85°C, module	58	A	
I _{dAVM} ①	module	75	A	
I _{FSM}	T _{vJ} = 45°C; V _R = 0	500	A	
	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	525	A	
	T _{vJ} = T _{vJM} V _R = 0	415	A	
	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	440	A	
I ² t	T _{vJ} = 45°C V _R = 0	1250	A ² s	
	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	1160	A ² s	
	T _{vJ} = T _{vJM} V _R = 0	860	A ² s	
	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine	810	A ² s	
T _{vJ}		-40...+125	°C	
T _{vJM}		125	°C	
T _{stg}		-40...+125	°C	
V _{ISOL}	50/60 Hz, RMS I _{ISOL} ≤ 1 mA	t = 1 min t = 1 s	3000 3600	V~
M _d	Mounting torque (M5) (10-32 UNF)	(M5) (10-32 UNF)	2-2.5 18-22	Nm lb.in.
Weight	typ.		50	g

Symbol	Test Conditions	Characteristic Values		
I _R	V _R = V _{RRM} ; V _R = V _{RRM} ;	T _{vJ} = 25°C T _{vJ} = T _{vJM}	0.3 5	mA
V _F	I _F = 150 A;	T _{vJ} = 25°C	1.9	V
V _{T0}	For power-loss calculations only		0.9	V
r _T			6.0	mΩ
R _{thJC}	per diode, DC current		1.62	K/W
	per module		0.27	K/W
R _{thJH}	per diode, DC current		2.22	K/W
	per module		0.37	K/W
d _S	Creeping distance on surface		10	mm
d _A	Creepage distance in air		9.4	mm
a	Max. allowable acceleration		50	m/s ²

Data according to IEC 60747 and refer to a single diode unless otherwise stated.

① for resistive load at bridge output

IXYS reserves the right to change limits, test conditions and dimensions.

Features

- Package with DCB ceramic base plate
- Isolation voltage 3600 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- 1/4" fast-on terminals
- UL registered E 72873

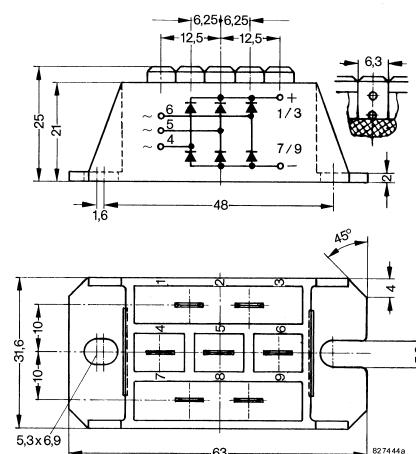
Applications

- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Rectifier for DC motors field current

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling

Dimensions in mm (1 mm = 0.0394")



Use output terminals in parallel connection!

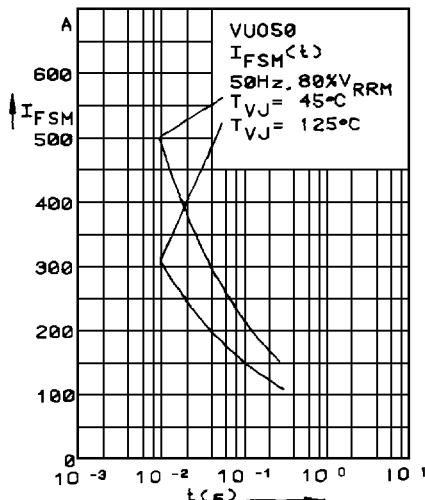


Fig. 1 Surge overload current
 I_{FSM} : Crest value, t : duration

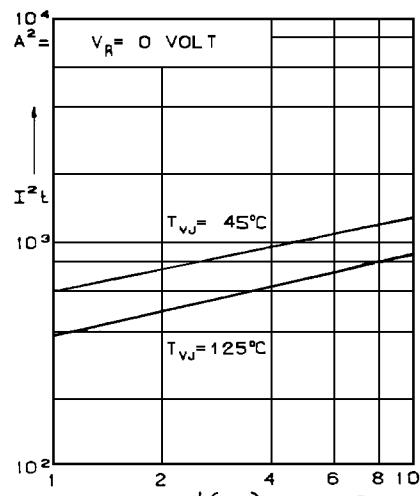


Fig. 2 I^2t versus time (1-10 ms)

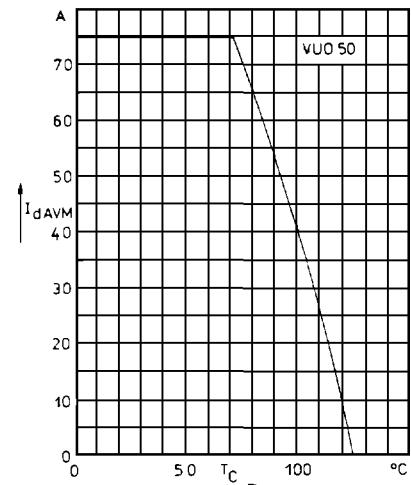


Fig. 3 Max. forward current at case temperature

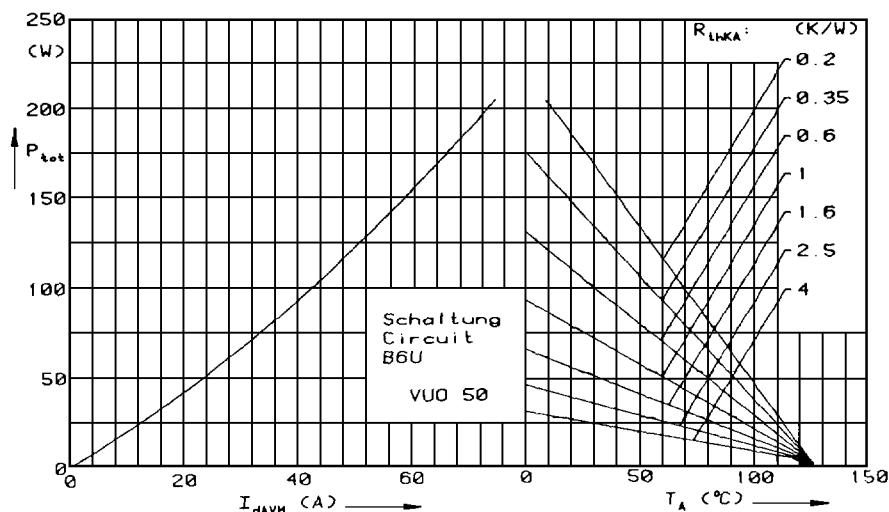


Fig. 4 Power dissipation versus forward current and ambient temperature

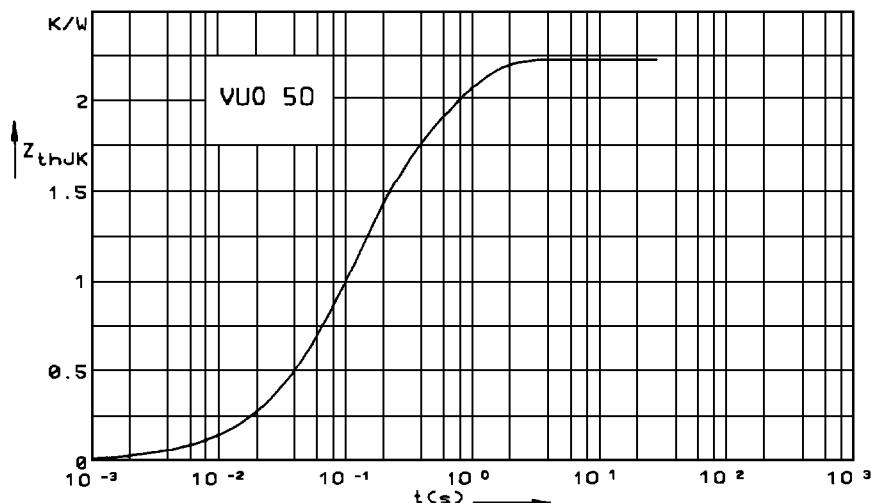


Fig. 5 Transient thermal impedance junction to heatsink per diode

Constants for Z_{thJK} calculation:

i	R_{thi} (K/W)	t_i (s)
1	1.21	0.1015
2	0.1339	0.1026
3	0.2763	0.4919
4	0.600	0.620