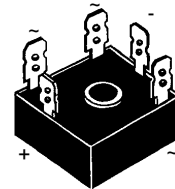
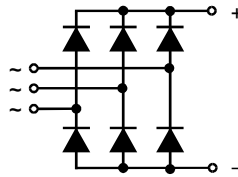


Three Phase Rectifier Bridge

$I_{dAVM} = 35 \text{ A}$
 $V_{RRM} = 1200-1800 \text{ V}$

V_{RSM} V	V_{RRM} V	Type
600	600	VUO 36-06NO8
1200	1200	VUO 36-12NO8
1400	1400	VUO 36-14NO8
1600	1600	VUO 36-16NO8
1800	1800	VUO 36-18NO8



Symbol	Test Conditions	Maximum Ratings	Features	
I_{dAV} I_{dAVM}	$T_C = 85^\circ\text{C}$, module $T_C = 62^\circ\text{C}$, module	27 35	A A	
I_{FSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	550 600	A A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	500 550	A A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	1520 1520	A^2s A^2s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	$t = 10 \text{ ms}$ (50 Hz), sine $t = 8.3 \text{ ms}$ (60 Hz), sine	1250 1250	A^2s A^2s
T_{VJ} T_{VJM} T_{sig}			-40...+150 150 -40...+150	$^\circ\text{C}$ $^\circ\text{C}$ $^\circ\text{C}$
V_{ISOL}	50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$	$t = 1 \text{ min}$ $t = 1 \text{ s}$	2500 3000	V~ V~
M_d	Mounting torque (M5) (10-32 UNF)		$2 \pm 10 \%$ $18 \pm 10 \%$	Nm lb.in.
Weight	typ.		22	g

Features

- Package with ¼" fast-on terminals
- Isolation voltage 3000 V~
- Planar passivated chips
- Blocking voltage up to 1800 V
- Low forward voltage drop
- UL registered E 72873

Applications

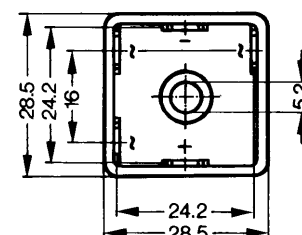
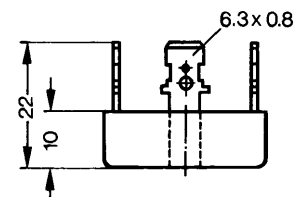
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

- Easy to mount with one screw
- Space and weight savings
- Improved temperature and power cycling

Symbol	Test Conditions	Characteristic Values	
I_R	$T_{VJ} = 25^\circ\text{C}$; $T_{VJ} = T_{VJM}$;	$V_R = V_{RRM}$ $V_R = V_{RRM}$	≤ 0.3 mA ≤ 2.0 mA
V_F	$I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$		≤ 1.7 V
V_{TO}	For power-loss calculations only		0.8 V
r_T			7.4 mΩ
R_{thJC}	per diode; DC current per module		7.5 K/W 1.25 K/W
R_{thJH}	per diode; DC current per module		8.4 K/W 1.4 K/W
d_s	Creeping distance on surface		12.7 mm
d_A	Creepage distance in air		9.4 mm
a	Max. allowable acceleration		50 m/s ²

Dimensions in mm (1 mm = 0.0394")



Data according to DIN IEC 60747 and refer to a single diode unless otherwise stated.
 IXYS reserves the right to change limits, test conditions and dimensions.

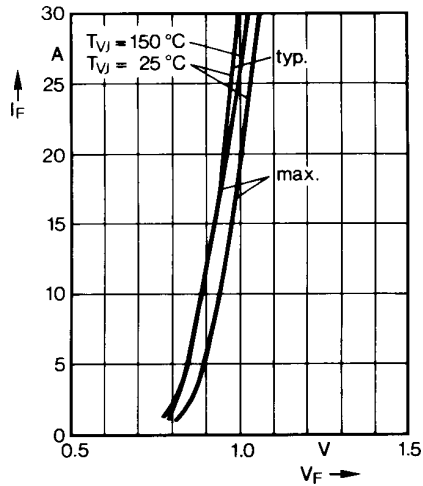


Fig. 1 Forward current versus voltage drop per diode

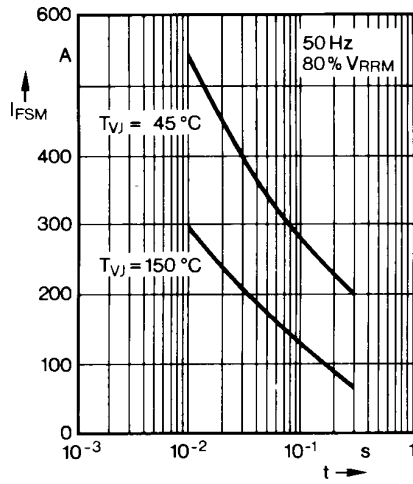


Fig. 2 Surge overload current per diode
I_{FSM}: Crest value. t: duration

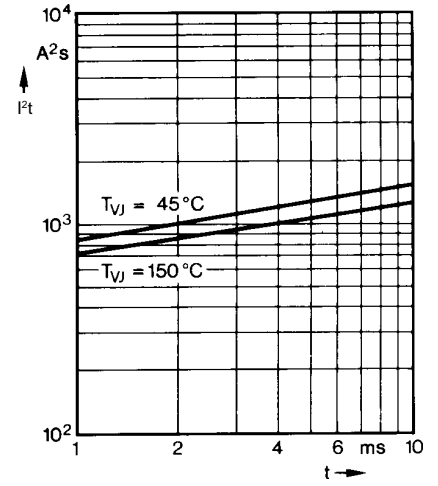


Fig. 3 I²t versus time (1-10 ms) per diode

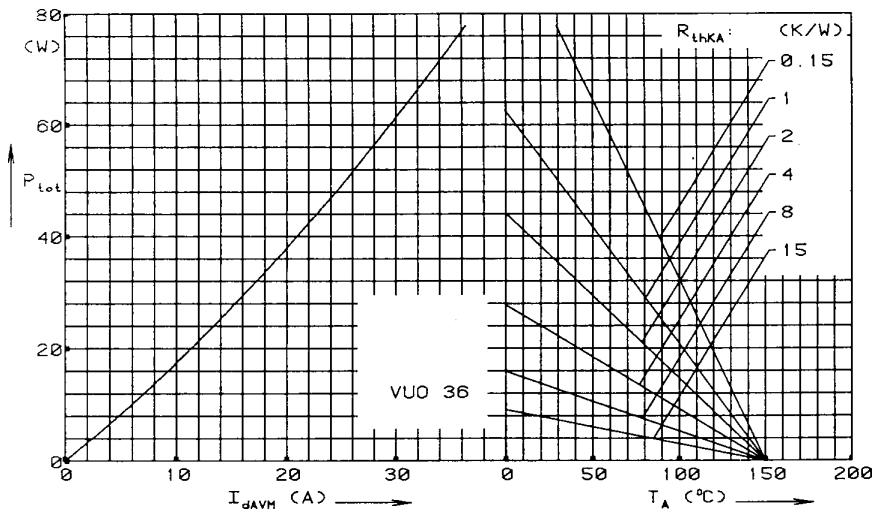


Fig. 4 Power dissipation versus direct output current and ambient temperature

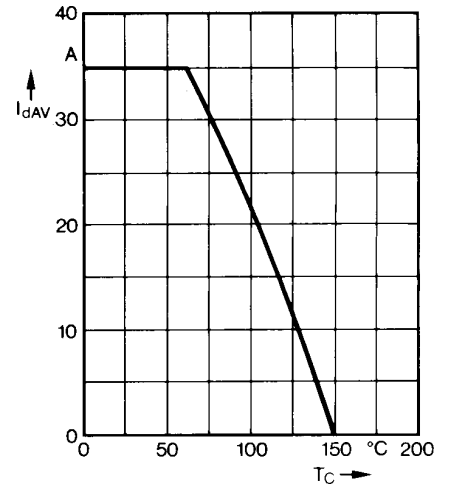


Fig. 5 Maximum forward current at case temperature

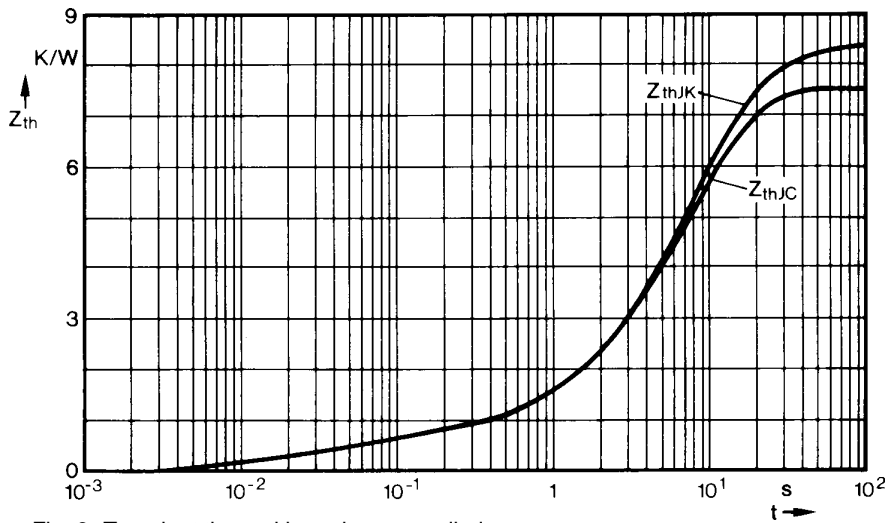


Fig. 6 Transient thermal impedance per diode

Constants for Z_{thJC} calculation:

i	R _{thi} (K/W)	t _i (s)
1	0.183	0.032
2	0.528	0.085
3	1.89	5.9
4	4.9	8.3

Constants for Z_{thJK} calculation:

i	R _{thi} (K/W)	t _i (s)
1	0.183	0.032
2	0.528	0.085
3	1.89	5.9
4	4.9	8.3
5	0.9	28.0