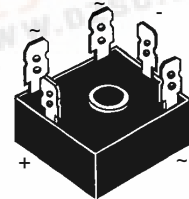
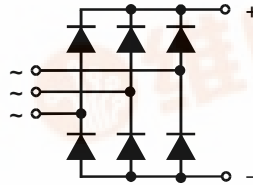


Three Phase Rectifier Bridge

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

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

Features

- Package with 1/4" 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

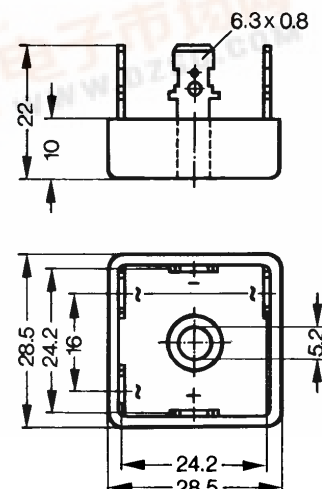
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

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

Symbol	Test Conditions	Characteristic Values	
I_R	$T_{VJ} = 25^\circ\text{C}$; $T_{VJ} = T_{VJM}$	$V_R = V_{RRM}$	$\leq 0.3 \text{ mA}$
		$V_R = V_{RRM}$	$\leq 2.0 \text{ mA}$
V_F	$I_F = 150 \text{ A}$; $T_{VJ} = 25^\circ\text{C}$	$\leq 1.7 \text{ V}$	
V_{T0}	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.

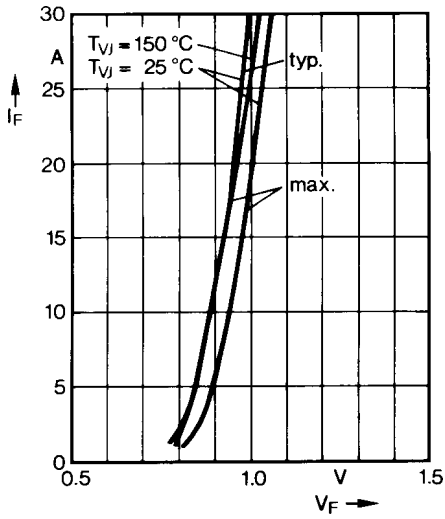


Fig. 1 Forward current versus voltage drop per diode

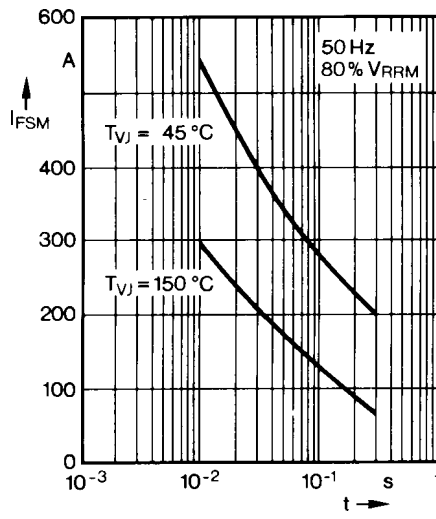


Fig. 2 Surge overload current per diode
 I_{FSM} : Crest value. t: duration

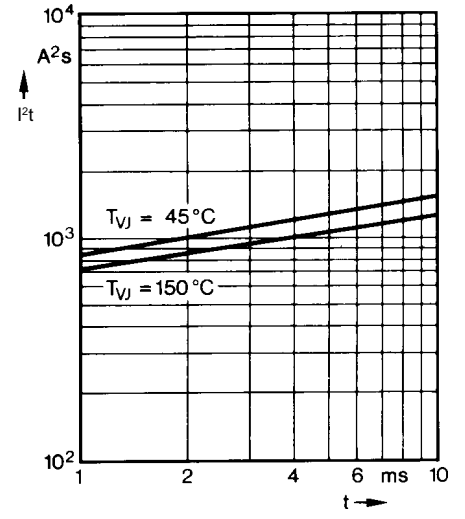


Fig. 3 I^2t versus time (1-10 ms) per diode

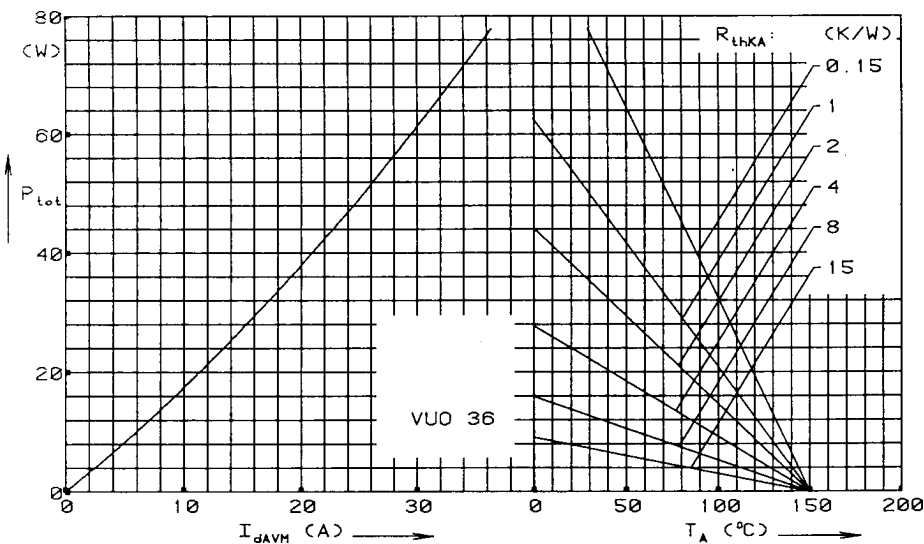


Fig. 4 Power dissipation versus direct output current and ambient temperature

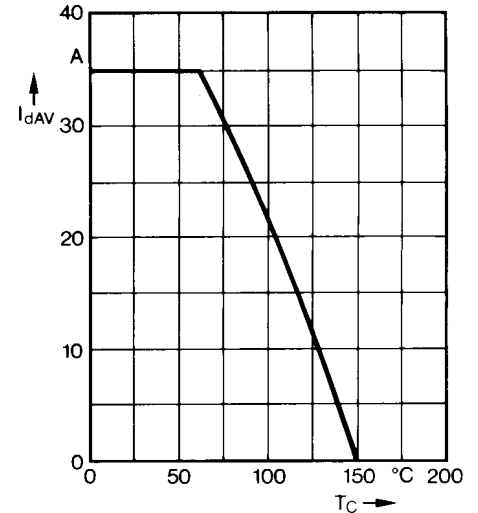


Fig. 5 Maximum forward current at case temperature

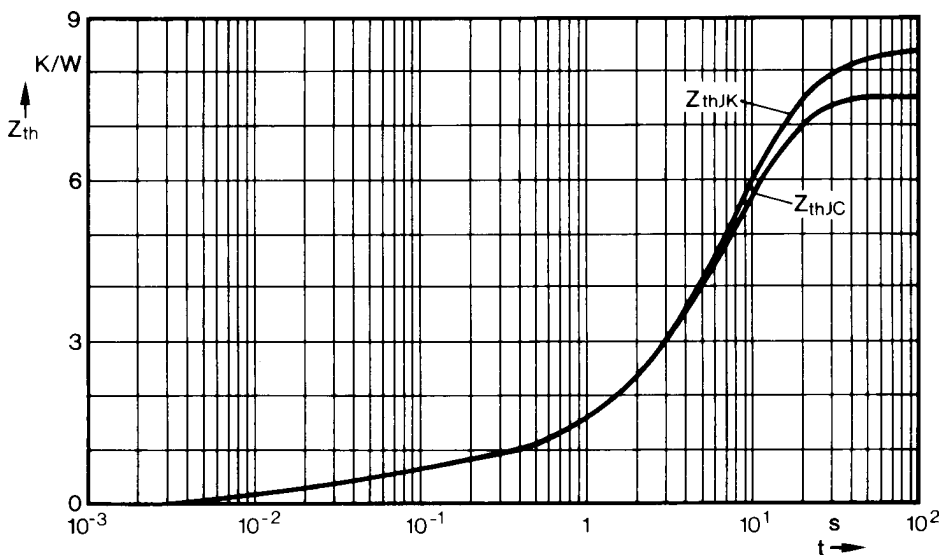


Fig. 6 Transient thermal impedance per diode

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