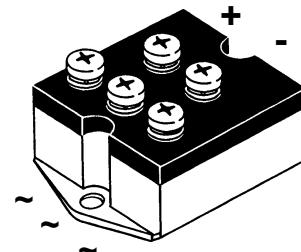
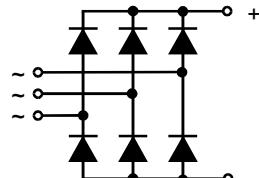


Three Phase Rectifier Bridge

I_{dAVM} = 58 A
V_{RRM} = 1200-1800 V

V _{RSM} V	V _{RRM} V	Type
1200	1200	VUO 55-12NO7
1400	1400	VUO 55-14NO7
1600	1600	VUO 55-16NO7
1800	1800	VUO 55-18NO7*

* delivery time on request



Symbol	Test Conditions	Maximum Ratings		
I _{dAVM}	T _C = 85°C, module	58	A	
I _{FSM}	T _{VJ} = 45°C; V _R = 0	750 820	A	
	T _{VJ} = T _{VJM} V _R = 0	670 740	A	
I ² t	T _{VJ} = 45°C V _R = 0	2800 2820	A ² s	
	T _{VJ} = T _{VJM} V _R = 0	2250 2300	A ² s	
T _{VJ}		-40...+150	°C	
T _{VJM}		150	°C	
T _{stg}		-40...+150	°C	
V _{ISOL}	50/60 Hz, RMS I _{ISOL} ≤ 1 mA	2500 3000	V~	
M _d	Mounting torque (M5)	5 ± 15 % 44 ± 15 %	Nm	
	Terminal connection torque (M5)	3 ± 15 % 26 ± 15 %	Nm lb.in.	
Weight	typ.	260	g	

Symbol	Test Conditions	Characteristic Values		
I _R	V _R = V _{RRM} ; T _{VJ} = 25°C	≤ 0.3	mA	
	V _R = V _{RRM} ; T _{VJ} = T _{VJM}	≤ 10.0	mA	
V _F	I _F = 150 A; T _{VJ} = 25°C	≤ 1.6	V	
V _{T0}	For power-loss calculations only	0.85	V	
r _T		8	mΩ	
R _{thJC}	per diode; DC current	2.7	K/W	
	per module	0.45	K/W	
R _{thJH}	per diode; DC current	3.06	K/W	
	per module	0.51	K/W	

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

Features

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

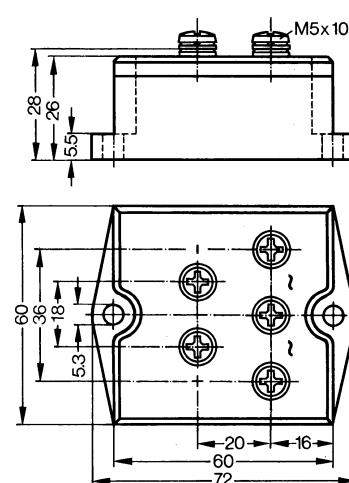
Applications

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

Advantages

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

Dimensions in mm (1 mm = 0.0394")



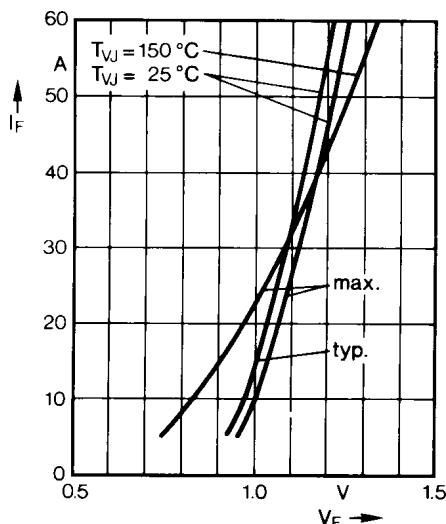


Fig. 1 Forward current versus voltage drop per diode

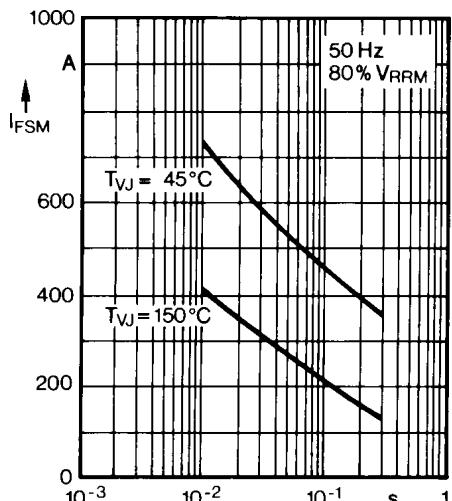


Fig. 2 Surge overload current per diode
I_{FSM}: Crest value. t: duration

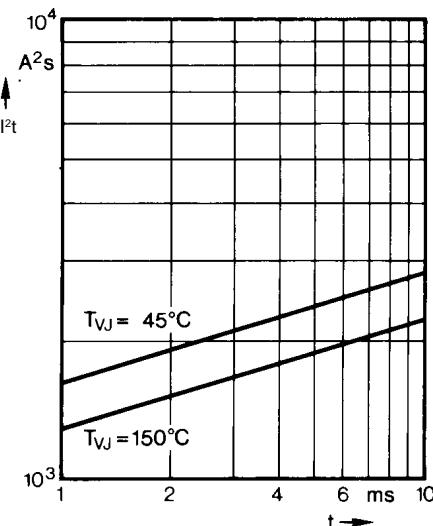


Fig. 3 I²t versus time (1-10 ms) per diode

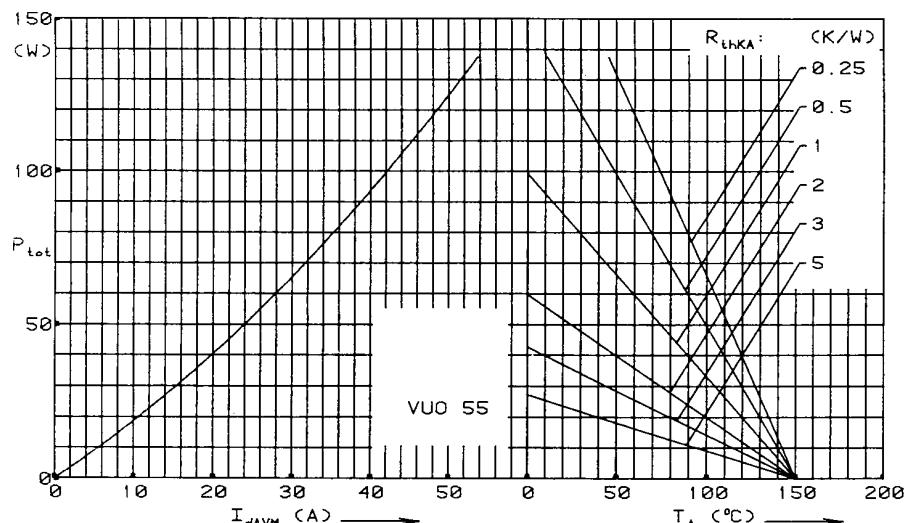


Fig. 4 Power dissipation versus direct output current and ambient temperature

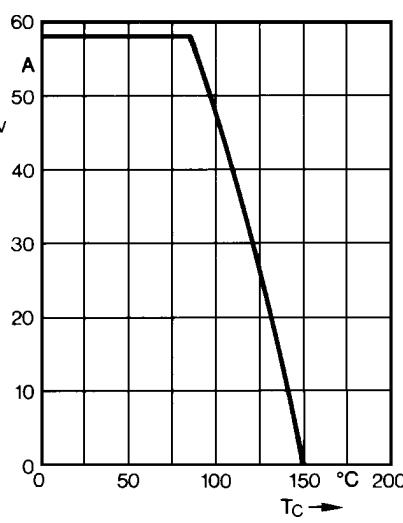


Fig. 5 Maximum forward current at case temperature

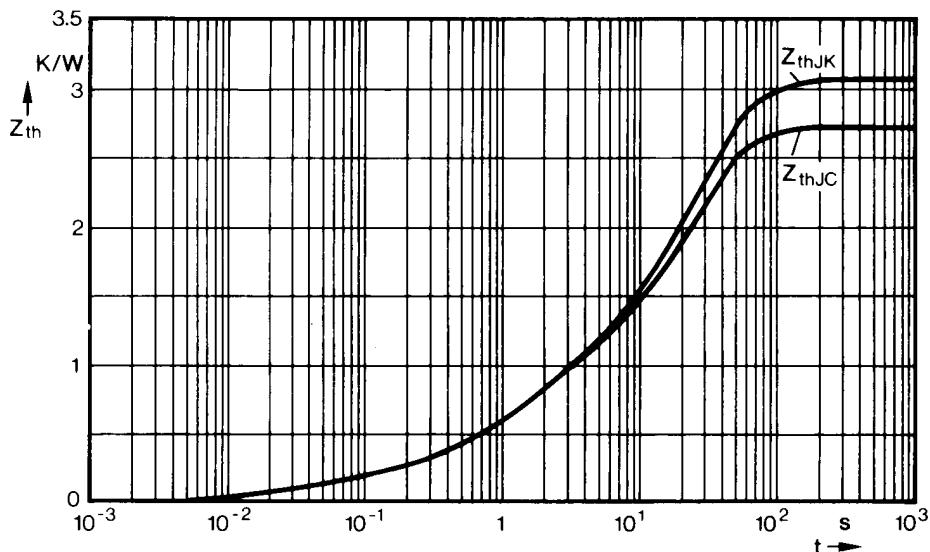


Fig. 6 Transient thermal impedance per diode

Constants for Z_{thJC} calculation:

i	R_{thi} (K/W)	t_i (s)
1	0.036	0.013
2	0.149	0.034
3	0.615	1.35
4	1.9	23.0

Constants for Z_{thJK} calculation:

i	R_{thi} (K/W)	t_i (s)
1	0.036	0.013
2	0.149	0.034
3	0.615	1.35
4	1.9	23.0
5	0.36	52.0