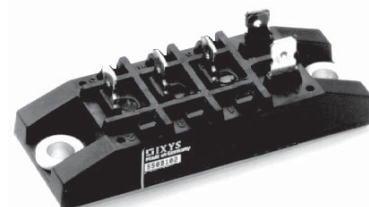
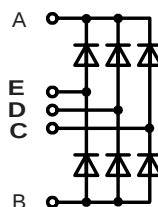


Three Phase Rectifier Bridge

$$\begin{aligned} I_{dAV} &= 70 \text{ A} \\ V_{RRM} &= 800\text{-}1600 \text{ V} \end{aligned}$$

V_{RSM}	V_{RRM}	Types
V	V	
900	800	VUO 70-08NO7
1300	1200	VUO 70-12NO7
1500	1400	VUO 70-14NO7
1700	1600	VUO 70-16NO7



Symbol	Conditions	Maximum Ratings	
I_{dAV} ①	T _C = 100°C, module	70	A
I_{FSM}	T _{VJ} = 45°C;	550	A
	V _R = 0	600	A
	T _{VJ} = T _{VJM}	500	A
	V _R = 0	550	A
I²t	T _{VJ} = 45°C	1520	A ² s
	V _R = 0	1520	A ² s
	T _{VJ} = T _{VJM}	1250	A ² s
	V _R = 0	1250	A ² s
T_{VJ}		-40...+150	°C
T_{VJM}		150	°C
T_{stg}		-40...+125	°C
V_{ISOL}	50/60 Hz, RMS	2500	V~
	I _{ISOL} ≤ 1 mA	3000	V~
M_d	Mounting torque (M5)	5 ± 15 %	Nm
	(10-32 UNF)	44 ± 15 %	lb.in.
Weight	typ.	110	g

Features

- Package with copper base plate
- Isolation voltage 3000 V~
- Planar passivated chips
- Low forward voltage drop
- ¼" fast-on power terminals

Applications

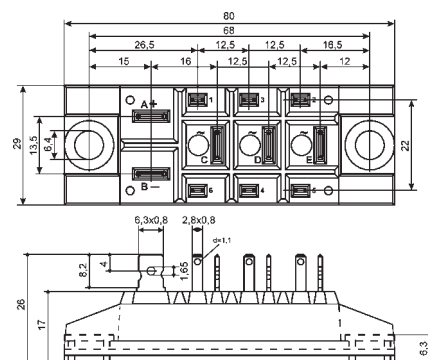
- Supplies for DC power equipment
- Input rectifiers for PWM inverter
- Battery DC power supplies
- Field supply for DC motors

Advantages

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

Symbol	Conditions	Characteristic Values		
I_R	$V_R = V_{RRM}; \quad T_{VJ} = 25^{\circ}\text{C}$	$\leq$	0.5	mA
	$V_R = V_{RRM}; \quad T_{VJ} = T_{VJM}$	$\leq$	10	mA
V_F	$I_F = 150 \text{ A}; \quad T_{VJ} = 25^{\circ}\text{C}$	$\leq$	1.7	V
V_{T0}	For power-loss calculations only			0.8 V
r_T				8 m Ω
R_{thJC}	per diode; DC current		1.45	K/W
	per module		0.242	K/W
R_{thJH}	per diode, DC current		1.9	K/W
	per module		0.317	K/W
d_s	Creeping distance on surface		16.1	mm
d_A	Creepage distance in air		7.5	mm
a	Max. allowable acceleration		50	m/s ²

Dimensions in mm (1 mm = 0.0394")



Data according to IEC 60747 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.

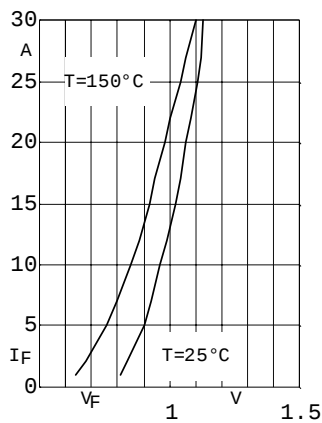


Fig. 1 Forward current versus voltage drop per diode

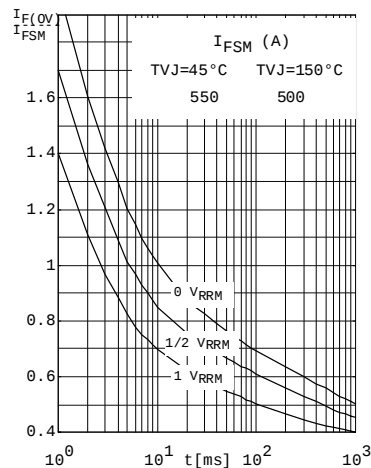


Fig. 2 Surge overload current per diode
 I_{FSM} : Crest value. t : duration

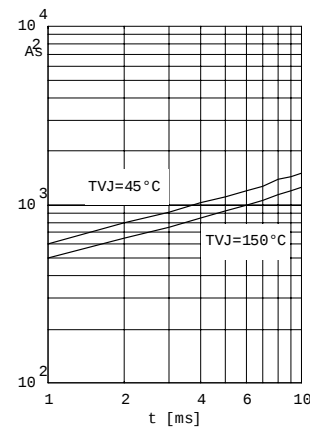


Fig. 3 i^2dt versus time (1-10ms) per diode or thyristor

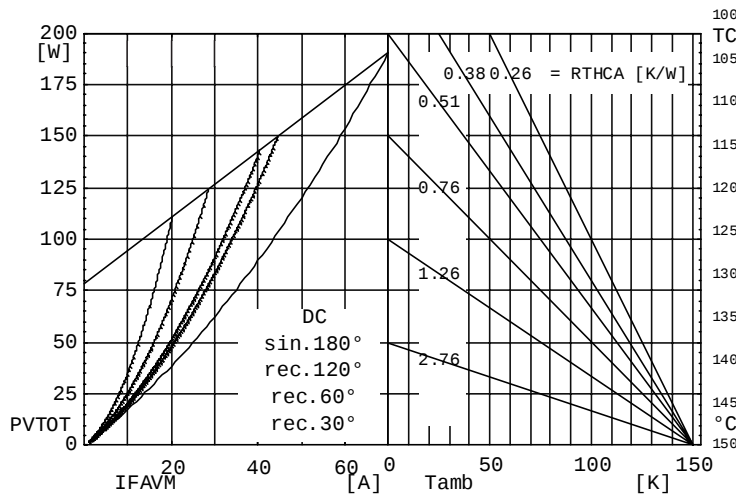


Fig. 4 Power dissipation versus direct output current and ambient temperature

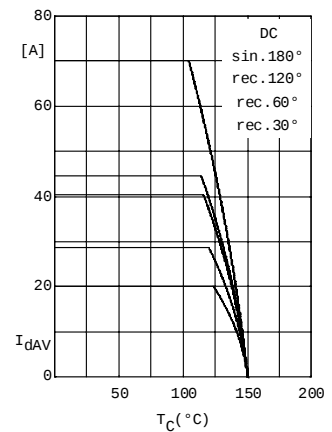


Fig. 5 Maximum forward current at case temperature

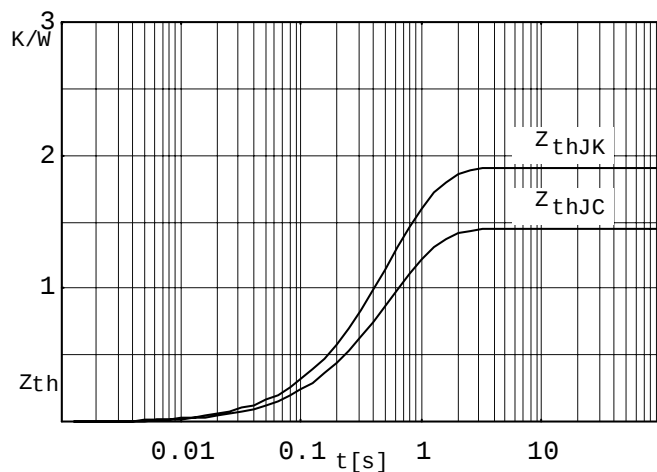


Fig. 6 Transient thermal impedance per diode or Thyristor, calculated