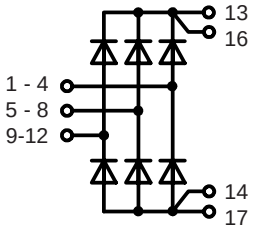
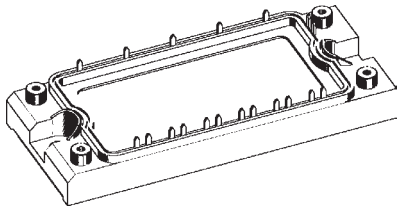
Three Phase Rectifier Bridge

I_{dAVM} = 118 A
V_{RRM} = 1600 V

Preliminary data

V_{RRM} V	Type
1600	VUO 121-16 NO1





Symbol	Test Conditions	Maximum Ratings	
V_{RRM}		1600	V
I_{dAVM}	T_C = 100°C, sinusoidal 120°	118	A
I_{FSM}	T_{VJ} = 45°C, t = 10 ms, V_R = 0 V	650	A
	T_{VJ} = 150°C, t = 10 ms, V_R = 0 V	580	A
I^2t	T_{VJ} = 45°C, t = 10 ms, V_R = 0 V	2110	A
	T_{VJ} = 150°C, t = 10 ms, V_R = 0V	1630	A
P_{tot}	T_C = 25°C per diode	120	W
T_{VJ}		-40...+150	°C
T_{VJM}		150	°C
T_{stg}		-40...+125	°C
V_{ISOL}	50/60 Hz, t = 1 min	2500	V~
	I_{ISOL} ≤ 1 mA, t = 1 s	3000	V~
M_d	Mounting torque (M5)	4	Nm
	(10-32 UNF)	35.4	lb.in.
d_S	Creep distance on surface	6	mm
d_A	Strike distance in air	6	mm
Weight	typ.	180	g

Symbol	Test Conditions	Characteristic Values min.	typ.	max.	
I_R	$V_R = V_{RRM}$, T_{VJ} = 25°C			0.1	mA
	$V_R = V_{RRM}$, T_{VJ} = 150°C			1.5	mA
V_F	I_F = 100 A, T_{VJ} = 25°C			1.55	V
V_{F0}	For power-loss calculations only			0.8	V
r_T	T_{VJ} = 150°C			5	mΩ
R_{thJC}	per diode; sinusoidal 120°			0.8	K/W
R_{thCH}			0.1		K/W
$R_{Pin-Chip}$			2.5		mΩ

Features

- Industry standard package with insulated copper plate and soldering pins for PCB mounting
- Isolation voltage 3000 V~
- Convenient package outline

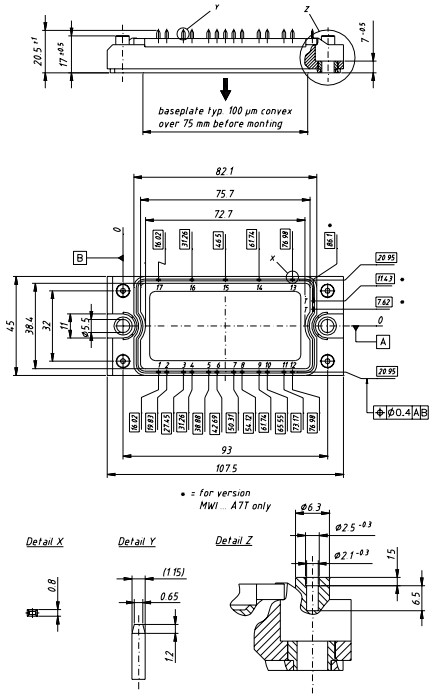
Applications

- Input Rectifier for Drive Inverters

Advantages

- Easy to mount with two screws
- Suitable for wave soldering
- High temperature and power cycling capability

Dimensions in mm (1 mm = 0.0394")



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

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