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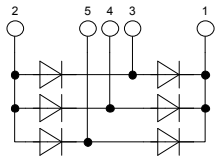
Standard Rectifier Module

3~ Bipolar Bridge

V_{RRM} = 1600 V
I_{DAV} = 164 A
V_F = 1.02 V

Part number

VUO162-16NO7



Features / Advantages:

- Planar passivated chips
- Very low leakage current
- Very low forward voltage drop
- Improved thermal behaviour

Applications:

- Diode Bridge for main rectification

Package:

- Housing: PWS-E Flat
- Cu base plate internal DCB isolated
- Easy to mount with two screws
- RoHS compliant

Symbol	Definition	Conditions		Ratings min.	typ.	max.	Unit
V_{RRM}	*max. repetitive reverse voltage*		T_{VJ} = 25°C			1600	V
I_R	*reverse current*	V_R = 1600 V	T_{VJ} = 25°C			200	µA
		V_R = 1600 V	T_{VJ} = 150°C			2	mA
V_F	*forward voltage*	I_F = 55 A	T_{VJ} = 25°C			1.11	V
		I_F = 110 A				1.25	V
		I_F = 55 A	T_{VJ} = 125°C			1.02	V
		I_F = 110 A				1.24	V
I_{DAV}	*bridge output current*	120° sine	T_C = 115°C			164	A
V_{F0}	*threshold voltage* } *for power loss calculation only*		T_{VJ} = 150°C			0.77	V
r_F	*slope resistance* }					4.1	mΩ
R_{thJC}	*thermal resistance junction to case*					0.40	K/W
T_{VJ}	*virtual junction temperature*			-40		150	°C
P_{tot}	*total power dissipation*		T_C = 25°C			310	W
I_{FSM}	*max. forward surge current*	t = 10 ms; (50 Hz), sine	T_{VJ} = 45°C			1.80	kA
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			1.95	kA
		t = 10 ms; (50 Hz), sine	T_{VJ} = 150°C			1.53	kA
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			1.65	kA
I^2t	*value for fusing*	t = 10 ms; (50 Hz), sine	T_{VJ} = 45°C			16.2	kA²s
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			15.7	kA²s
		t = 10 ms; (50 Hz), sine	T_{VJ} = 150°C			11.7	kA²s
		t = 8,3 ms; (60 Hz), sine	V_R = 0 V			11.3	kA²s
C_J	*junction capacitance*	V_R = 400 V; f = 1 MHz	T_{VJ} = 25°C		60		pF

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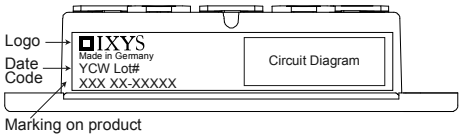
Symbol	Definition	Conditions	Ratings min.	typ.	max.	Unit
I_{RMS}	*RMS current*	per pin			200	A
R_{thCH}	*thermal resistance case to heatsink*			0.10		K/W
T_{stg}	*storage temperature*		-40		125	°C
Weight				220		g
M_D	*mounting torque*		4.25		5.75	Nm
V_{ISOL}	*isolation voltage*	t = 1 second	3600			V
		t = 1 minute	3000			V
d_S	*creapage distance on surface*		10			mm
d_A	*striking distance through air*		9.4			mm



Ordering	Part Name	Marking on Product	Delivering Mode	Base Qty	Code Key
Standard	VUO162-16NO7	VUO162-16NO7	Box	5	509870

Similar Part	Package	Voltage class
VUO160-16NO7	PWS-E	1600

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Outlines PWS-E Flat