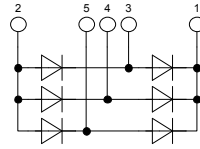


Standard Rectifier Module

3~ Bipolar Bridge

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

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

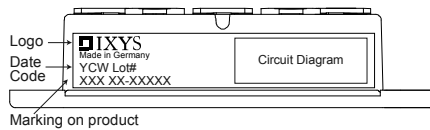
Package:

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

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

tentative

Symbol	Definition	Conditions	Ratings			Unit
			min.	typ.	max.	
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	creepage 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

Outlines PWS-E Flat

