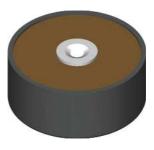


High Voltage Rectifiers

 $V_{\text{RRM}} = 8000 V$ $I_{\text{F(AV)M}} = 4.2 A$

V_{RRM}	Standard	Power Designation
V	Types	
8000	UGE 1112 AY4	Si-E 3000 / 1300-2.5





Symbol	Conditions		Maximum Rat	tinas
-	Conditione		7	A
F(RMS)	air self cooling;	$T_{amb} = 45^{\circ}C$	1	A
F(AV)M	an oon oooning,	- without cooling plate	2.0	А
		- with colling plate	2.5	А
	forced air cooling;			
	v = 3 m/s,	$T_{amb} = 35^{\circ}C$		
		- without cooling plate	3.2	A
		 with colling plate 	4.1	Α
	oil cooling;			
		$T_{amb} = 35^{\circ}C$		
		- without cooling plate	4.2	A
		- with colling plate	4.2	A
P _{RSM}	T _{vJ} = 150°C;	t _p = 10 μs	2.5	kW
I _{FSM}	non repetitive, 50 d	n repetitive, 50 c/s (for 60 c/s add 10%)		
	$T_{v_J} = 45^{\circ}C;$	t _p = 10 ms	120	A
	$T_{v_{J}} = 150^{\circ}C;$	$t_p = 10 \text{ ms}$	100	A
T _{vj}			-40+150	°C
T _{sta}			-40+150	°C
T _{VJM}			150	°C
Weight			122	g
Symbol	Conditions		Characteristic Va	alues
I _R	$V_{R} = V_{RRM}$	$T_{VJ} = 150^{\circ}C$	<u>≤</u> 1	mA
V _F	I _F = 7 A	$T_{vJ} = 25^{\circ}C$	6.25	V
V _{T0}		T _{vj} = 150°C	4,25	V
r _T		$T_{VJ}^{VO} = 150^{\circ}C$	215	mΩ
а	f = 50Hz		5 x 9.81	m/s²
М _d			8	Nm
Data according to IEC 60747-				

Features

- Hermetically sealed Epoxy
- Use in oil
- Avalanche characteristics

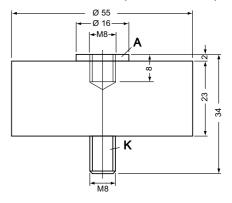
Applications

- X-Ray equipment
- Electrostatic dust precipitators
- Electronic beam welding
- Lasers
- Cable test equipment

Advantages

- Simple mounting
- Improved temperature and power cycling
- Reduced protection circuits
- · Series and parallel operation

Dimensions in mm (1 mm = 0.0394")



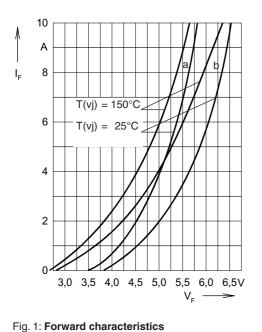
Disclaimer Notice

Information furnished is believed to be accurate and reliable. However, users should independently

evaluate the suitability of and test each product selected for their own applications. Littelfuse products are not designed for, and may not be used in, all applications. Read complete Disclaimer Notice Disclaimer Notice at www.littelfuse.com/disclaimer-electronics.

IXYS reserve the right to change limits, test conditions and dimensions.





Instantaneous forward current I_F as a function of instantaneous

forward voltage drop V_F for junction temperature T_(vj) = 25°C and T_(vj)

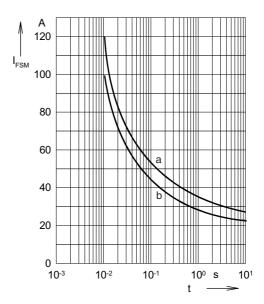


Fig. 2: Characteristics of maximum permissible current The curves show the non repetitive peak one cycle surge forward current I_{FSM} as a function of time *t* and serve for rating protective devices. a = Initial state $T_{(v)} = 45^{\circ}C$ b = Initial state $T_{(v)} = 150^{\circ}C$

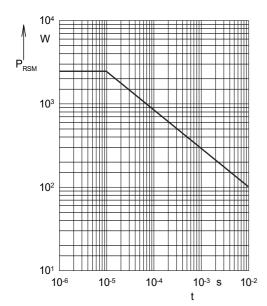


Fig. 3: Power loss

= 150°C

a = Mean value characteristic

b = Limit value characteristic

Non repetitive peak reverse power loss $P_{_{RSM}}$ as a function of time *t*, $T_{_{(vj)}} = 150^{\circ}C$

IXYS reserve the right to change limits, test conditions and dimensions.

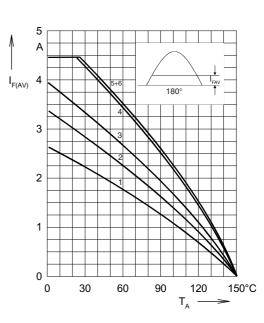


Fig. 4: Load diagramm

Mean forward current $I_{F(AV)}$ of <u>one</u> module for a sine half wave for various cooling modes as a function of the cooling medium temperature T_{amb} for a resistive load (horizontal mounting).

Cooling modes

•••••			
1 =	air self cooling	without	cooling plate
2 =	air self cooling	with	cooling plate
3 =	forced air cooling	without	cooling plate
4 =	forced air cooling	with	cooling plate
5	= oil cooling	without	cooling plate
6 =	oil cooling	with	cooling plate200123a

© 2020 IXYS All rights reserved