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With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

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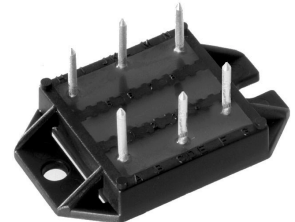
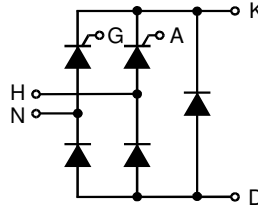
# Single Phase Rectifier Bridge

$$I_{dAV} = 32 \text{ A}$$

$$V_{RRM} = 600-1200 \text{ V}$$

Preliminary data

$V_{RSM}$ $V_{DSM}$ V	$V_{RRM}$ $V_{DRM}$ V	Type
700	600	VHF 25-06io7
900	800	VHF 25-08io7
1300	1200	VHF 25-12io7



Symbol	Test Conditions	Maximum Ratings	Features	
$I_{dAV}$ ①	$T_C = 85^\circ\text{C}$ , module	32 A	<b>Features</b> <ul style="list-style-type: none"> <li>• Package with DCB ceramic base plate</li> <li>• Isolation voltage 3000 V~</li> <li>• Planar passivated chips</li> <li>• Low forward voltage drop</li> <li>• Leads suitable for PC board soldering</li> </ul> <b>Applications</b> <ul style="list-style-type: none"> <li>• Supply for DC power equipment</li> <li>• DC motor control</li> </ul> <b>Advantages</b> <ul style="list-style-type: none"> <li>• Easy to mount with two screws</li> <li>• Space and weight savings</li> <li>• Improved temperature and power cycling capability</li> <li>• Small and light weight</li> </ul>	
$I_{TAVM}/I_{FAVM}$	$T_C = 85^\circ\text{C}$ ; (180° sine ; per thyristor)	16 A		
$I_{TSM}/I_{FSM}$	$T_{VJ} = 45^\circ\text{C}$ ; $V_R = 0$	t = 10 ms (50 Hz), sine		200 A
		t = 8.3 ms (60 Hz), sine		210 A
$I^2t$	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine		180 A
		t = 8.3 ms (60 Hz), sine		190 A
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f = 50 Hz, $t_p = 200 \mu\text{s}$ $V_D = 2/3 V_{DRM}$ $I_G = 0.15 \text{ A}$ $di_G/dt = 0.15 \text{ A}/\mu\text{s}$	repetitive, $I_T = 20 \text{ A}$		100 A/ $\mu\text{s}$
		non repetitive, $I_T = I_{TAVM}$		500 A/ $\mu\text{s}$
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$ ; $R_{GK} = \infty$ ; method 1 (linear voltage rise)	$V_{DR} = 2/3 V_{DRM}$		500 V/ $\mu\text{s}$
$V_{RGM}$		10 V		
$P_{GM}$	$T_{VJ} = T_{VJM}$ $I_T = I_{TAVM}$	$t_p = 30 \mu\text{s}$		≤ 5 W
		$t_p = 300 \mu\text{s}$		≤ 2.5 W
$P_{GAVM}$		0.5 W		
$T_{VJ}$		-40...+125 °C		
$T_{VJM}$		125 °C		
$T_{stg}$		-40...+125 °C		
$V_{ISOL}$	50/60 Hz, RMS $I_{ISOL} \leq 1 \text{ mA}$	t = 1 min	2500 V~	
		t = 1 s	3000 V~	
$M_d$	Mounting torque (M4)	1.5 - 2 Nm		
		14 - 18 lb.in.		
Weight	typ.	18 g		

Data according to IEC 60747 refer to a single diode/thyristor unless otherwise stated

① for resistive load at bridge output. IXYS reserves the right to change limits, test conditions and dimensions.

Symbol	Test Conditions	Characteristic Values	
$I_D, I_R$	$T_{VJ} = T_{VJM}; V_R = V_{RRM}; V_D = V_{DRM}$	$\leq$	5 mA
$V_T$	$I_T = 20 \text{ A}; T_{VJ} = 25^\circ\text{C}$	$\leq$	1.6 V
$V_{T0}$	For power-loss calculations only ( $T_{VJ} = 125^\circ\text{C}$ )		0.85 V
$r_T$			27 m $\Omega$
$V_{GT}$	$V_D = 6 \text{ V}; T_{VJ} = 25^\circ\text{C}$	$\leq$	1.5 V
	$T_{VJ} = -40^\circ\text{C}$	$\leq$	2.5 V
$I_{GT}$	$V_D = 6 \text{ V}; T_{VJ} = 25^\circ\text{C}$	$\leq$	25 mA
	$T_{VJ} = -40^\circ\text{C}$	$\leq$	50 mA
$V_{GD}$	$T_{VJ} = T_{VJM}; V_D = 2/3 V_{DRM}$	$\leq$	0.2 V
$I_{GD}$		$\leq$	3 mA
$I_L$	$T_{VJ} = 25^\circ\text{C}; t_p = 10 \mu\text{s}$ $I_G = 0.1 \text{ A}; di_G/dt = 0.1 \text{ A}/\mu\text{s}$	$\leq$	75 mA
$I_H$	$T_{VJ} = 25^\circ\text{C}; V_D = 6 \text{ V}; R_{GK} = \infty$	$\leq$	50 mA
$t_{gd}$	$T_{VJ} = 25^\circ\text{C}; V_D = 1/2 V_{DRM}$ $I_G = 0.1 \text{ A}; di_G/dt = 0.1 \text{ A}/\mu\text{s}$	$\leq$	2 $\mu\text{s}$
$R_{thJC}$	per thyristor; DC		1.3 K/W
	per module		0.22 K/W
$R_{thJK}$	per thyristor; DC		1.8 K/W
	per module		0.3 K/W
$d_S$	Creeping distance on surface		11.2 mm
$d_A$	Creepage distance in air		9.5 mm
$a$	Max. allowable acceleration		50 m/s <sup>2</sup>

**Dimensions in mm (1 mm = 0.0394")**
