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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.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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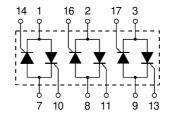


Three Phase AC Controller Modules

 $I_{RMS} = 3x 39 A$ $V_{RRM} = 800-1600 V$

Preliminary data

V _{RSM} V _{DSM}	V _{RRM} V _{DRM}	Туре
800	800	VWO 36-08io7
1200	1200	VWO 36-12io7
1400	1400	VWO 36-14io7
1600	1600	VWO 36-16io7





Symbol	Test Conditions	Maximum Ratings		
I _{RMS}	T _K = 85°C, 50 - 40	39	A	
I _{TRMS}				
ITAVM	$T_{K}^{v3} = 85^{\circ} C; (180^{\circ} s)$	$T_{VJ} = T_{VJM}$ $T_{K} = 85^{\circ}C; (180^{\circ} \text{ sine})$		Α
I _{TSM}	$T_{VJ} = 45^{\circ}C;$	t = 10 ms (50 Hz), sine	320	Α
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	350	A
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	280	Α
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	310	Α
l²t	$T_{VJ} = 45^{\circ}C$	t = 10 ms (50 Hz), sine	500	A^2s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	520	A ² s
	$T_{VJ} = T_{VJM}$	t = 10 ms (50 Hz), sine	390	A ² s
	$V_R = 0$	t = 8.3 ms (60 Hz), sine	400	A ² s
(di/dt) _{cr}	$T_{VJ} = T_{VJM}$ $f = 50 \text{ Hz}, t_{P} = 200$	repetitive, $I_T = 20 \text{ A}$ μs	150	A/μs
	$V_D = 2/3 V_{DRM}$			
	$I_{_{\rm G}} = 0.3 \text{ A}$ $di_{_{\rm G}}/dt = 0.3 \text{ A}/\mu\text{s}$	non repetitive, $I_T = I_{TAVM}$	500	A/μs
(dv/dt) _{cr}	$T_{VJ} = T_{VJM};$ $R_{GK} = \infty;$ method 1	1000	V/µs	
P _{GM}	$T_{VJ} = T_{VJM}$	t ₀ = 30 μs	10	W
	$I_{T} = I_{TAVM}$	t ₀ = 300 μs	5	W
P _{GAVM}	1 17.00	P	0.5	W
V _{RGM}			10	V
T _{vJ}			-40+125	°C
I _{VIM}			125	°C
T _{stg}			-40+125	°C
V _{ISOL}	50/60 Hz, RMS	t = 1 min	2500	V~
JUL	$I_{ISOL} \leq 1 \text{ mA}$	t = 1 s	3000	٧~
M _d	Mounting torque (M5)		5 ± 15 %	Nm
ū	J	(10-32 UNF)	$44\pm15~\%$	lb.in.
Weight	typ.		110	g

Features

- Thyristor controller for AC (circuit W3C acc. to IEC) for mains requency
- Package with metal base plate
- Isolation voltage 3000 V~
- · Planar passivated chips
- UL applied
- 1/4" fast-on power terminals

Applications

- Switching and control of three phase AC circuits
- · Softstart AC motor controller
- · Solid state switches
- · Light and temperature control

Advantages

- · Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling capability
- · High power density
- · Light weight and compact

Data according to IEC 60747 refer to a single thyristor/diode unless otherwise stated. IXYS reserves the right to change limits, test conditions and dimensions



Symbol	Test Conditions C		haracteristic Values		
I _D , I _R	$T_{VJ} = T_{VJM}; V_{R} = V_{RRM}; V_{D} = V_{DRM}$	≤	5	mA	
V _T	$I_{T} = 45 \text{ A}; T_{VJ} = 25^{\circ}\text{C}$	≤	1.45	V	
\mathbf{V}_{T0} \mathbf{r}_{T}	For power-loss calculations only		0.85 13	V mΩ	
\mathbf{V}_{GT}	$V_{D} = 6 \text{ V};$ $T_{VJ} = 25^{\circ}\text{C}$ $T_{VJ} = -40^{\circ}\text{C}$ $V_{D} = 6 \text{ V};$ $T_{VJ} = 25^{\circ}\text{C}$ $T_{VJ} = -40^{\circ}\text{C}$	< < < <	1.0 1.2 65 80	V V mA mA	
V _{GD}	$T_{VJ} = T_{VJM};$ $V_D = 2/3 V_{DRM}$	≤ ≤	0.2 5	V mA	
I <u>.</u>	$T_{VJ} = 25^{\circ}C$; $t_p = 10 \mu s$ $I_G = 0.3 A$; $di_G/dt = 0.3 A/\mu s$	≤	150	mA	
I _H	$T_{VJ} = 25^{\circ}C; V_{D} = 6 V; R_{GK} = \infty$	≤	100	mA	
t _{gd}	$T_{VJ} = 25^{\circ}C; V_{D} = 1/2 V_{DRM}$ $I_{G} = 0.3 A; di_{G}/dt = 0.3 A/\mu s$	≤	2	μS	
t _q	$T_{VJ} = T_{VJM}; I_T = 20 \text{ A}, t_p = 200 \mu\text{s}; di/dt = -10 A/\mu$ $V_R = 100 V; dv/dt = 15 V/\mu\text{s}; V_D = 2/3 V_{DRM}$	s typ.	150	μS	
R _{thJC}	per thyristor; sine 180°el per module per thyristor; sine 180°el per module		1.3 0.216 1.5 0.25	K/W K/W K/W	
d _s d _A a	Creeping distance on surface Creepage distance in air Max. allowable acceleration		16.1 6.0 50	mm mm m/s²	

Dimensions in mm (1 mm = 0.0394")

