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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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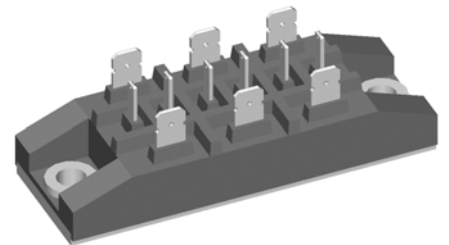
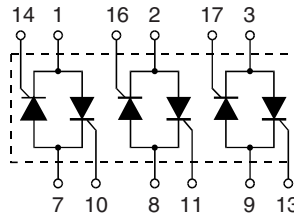
Three Phase AC Controller Modules

$$I_{RMS} = 3 \times 60 \text{ A}$$

$$V_{RRM} = 1200-1600 \text{ V}$$

Preliminary data

V_{RSM}	V_{RRM}	Type
V_{DSM}	V_{DRM}	
V	V	
1200	1200	VWO 60-12io7
1400	1400	VWO 60-14io7
1600	1600	VWO 60-16io7



Symbol	Conditions	Maximum Ratings	Features	
I_{RMS}	$T_K = 85^\circ\text{C}$, 50 - 400 Hz (per phase)	60 A	<ul style="list-style-type: none"> Thyristor controller for AC (circuit W3C acc. to IEC) for mains frequency Package with metal base plate Isolation voltage 3000 V~ Planar passivated chips UL applied 1/4" fast-on power terminals 	
I_{TRMS}	$T_{VJ} = T_{VJM}$	43 A		
I_{TAVM}	$T_K = 85^\circ\text{C}$; (180° sine)	27 A		
I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine		550 A 600 A
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine		500 A 550 A
I^2t	$T_{VJ} = 45^\circ\text{C}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine		1520 A ² s 1520 A ² s
	$T_{VJ} = T_{VJM}$ $V_R = 0$	t = 10 ms (50 Hz), sine t = 8.3 ms (60 Hz), sine		1250 A ² s 1250 A ² s
$(di/dt)_{cr}$	$T_{VJ} = T_{VJM}$ f = 50 Hz, $t_p = 200 \mu\text{s}$ $V_D = 2/3 V_{DRM}$ $I_G = 0.45 \text{ A}$ $di_G/dt = 0.45 \text{ A}/\mu\text{s}$	repetitive, $I_T = 25 \text{ A}$		150 A/ μs
		non repetitive, $I_T = I_{TAVM}$		500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = T_{VJM}$; $R_{GK} = \infty$; method 1 (linear voltage rise)	$V_{DR} = 2/3 V_{DRM}$		1000 V/ μs
P_{GM}	$T_{VJ} = T_{VJM}$	$t_p = 30 \mu\text{s}$	10 W	
	$I_T = I_{TAVM}$	$t_p = 300 \mu\text{s}$	5 W	
P_{GAVM}			0.5 W	
V_{RGM}			10 V	
T_{VJ}			-40...+125 °C	
T_{VJM}			125 °C	
T_{stg}			-40...+125 °C	
V_{ISOL}	50/60 Hz, RMS	t = 1 min	2500 V~	
	$I_{ISOL} \leq 1 \text{ mA}$	t = 1 s	3000 V~	
M_d	Mounting torque (M5) (10-32 UNF)		5 ± 15 % Nm	
			44 ± 15 % lb.in.	
Weight	typ.		110 g	

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

Symbol	Conditions	Characteristic Values	
I_D, I_R	$T_{VJ} = T_{VJM}; V_R = V_{RRM}; V_D = V_{DRM}$	\leq	5 mA
V_T	$I_T = 45 \text{ A}; T_{VJ} = 25^\circ\text{C}$	\leq	1.45 V
V_{T0}	For power-loss calculations only		0.85 V
r_T			11 m Ω
V_{GT}	$V_D = 6 \text{ V}; T_{VJ} = 25^\circ\text{C}$	\leq	1.5 V
	$T_{VJ} = -40^\circ\text{C}$	\leq	1.6 V
I_{GT}	$V_D = 6 \text{ V}; T_{VJ} = 25^\circ\text{C}$	\leq	100 mA
	$T_{VJ} = -40^\circ\text{C}$	\leq	200 mA
V_{GD}	$T_{VJ} = T_{VJM}; V_D = 2/3 V_{DRM}$	\leq	0.2 V
I_{GD}		\leq	5 mA
I_L	$T_{VJ} = 25^\circ\text{C}; t_p = 10 \mu\text{s}$ $I_G = 0.45 \text{ A}; di_G/dt = 0.45 \text{ A}/\mu\text{s}$	\leq	450 mA
I_H	$T_{VJ} = 25^\circ\text{C}; V_D = 6 \text{ V}; R_{GK} = \infty$	\leq	200 mA
t_{gd}	$T_{VJ} = 25^\circ\text{C}; V_D = 1/2 V_{DRM}$ $I_G = 0.45 \text{ A}; di_G/dt = 0.45 \text{ A}/\mu\text{s}$	\leq	2 μs
t_q	$T_{VJ} = T_{VJM}; I_T = 20 \text{ A}, t_p = 200 \mu\text{s}; di/dt = -10 \text{ A}/\mu\text{s}$ $V_R = 100 \text{ V}; dv/dt = 15 \text{ V}/\mu\text{s}; V_D = 2/3 V_{DRM}$	typ.	150 μs
R_{thJC}	per thyristor; sine 180°el		0.9 K/W
	per module		0.15 K/W
R_{thJK}	per thyristor; sine 180°el		1.1 K/W
	per module		0.183 K/W
d_s	Creeping distance on surface		16.1 mm
d_A	Creepage distance in air		6.0 mm
a	Max. allowable acceleration		50 m/s ²

Dimensions in mm (1 mm = 0.0394")
