Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

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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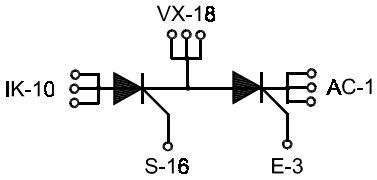
Thyristor Modules

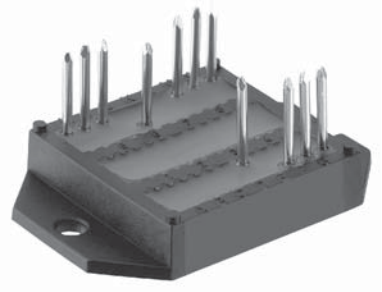
ECO-PAC 2

I_{TRMS} = 2x180A
I_{TAVM} = 2x105A
V_{RRM} = 800-1800 V

Preliminary Data

V_{RSM} V_{DSM} V	V_{RRM} V_{DRM} V	Typ
900	800	VCC 105 - 08io7
1300	1200	VCC 105 - 12io7
1500	1400	VCC 105 - 14io7
1700	1600	VCC 105 - 16io7
1900	1800	VCC 105 - 18io7





Symbol	Conditions		Maximum Ratings	
I_{TRMS}			180	A
I_{TAVM}	T_C = 85°C; 180° sine		105	A
I_{TSM}	T_{VJ} = 45°C; V_R = 0 V;	t = 10 ms (50 Hz), sine	2250	A
		t = 8.3 ms (60 Hz), sine	2400	A
	T_{VJ} = 125°C; V_R = 0 V;	t = 10 ms (50 Hz), sine	2000	A
		t = 8.3 ms (60 Hz), sine	2150	A
I^2dt	T_{VJ} = 45°C; V_R = 0 V;	t = 10 ms (50 Hz), sine	25300	A^2s
		t = 8.3 ms (60 Hz), sine	23900	A^2s
	T_{VJ} = 125°C; V_R = 0 V;	t = 10 ms (50 Hz), sine	20000	A^2s
		t = 8.3 ms (60 Hz), sine	19100	A^2s
$(di/dt)_{cr}$	T_{VJ} = 125°C; f = 50 Hz; t_P = 200 µs; $V_D = {}^2/_3V_{DRM}$;	repetitive, I_T = 250 A	150	A/µs
	I_G = 0.45 A di_G/dt = 0.45 A/µs;	non repetitive, $I_T = I_{TAVM}$	500	A/µs
$(dv/dt)_{cr}$	T_{VJ} = 125°C; $V_{DR} = {}^2/_3V_{DRM}$ R_{GK} = ∞, method 1 (linear voltage rise)		1000	V/µs
P_{GM}	T_{VJ} = 125°C;	t_P = 30 ms	≤ 10	W
	$I_T = I_{TAVM}$;	t_P = 300 ms	≤ 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	3000	V ~
	I_{ISOL} ≤ 1 mA	t = 1 s	3600	V ~
M_d	Mounting torque	(M4)	1.5 - 2.0	Nm
			14 - 18	lb.in.
Weight	typ.		26	g

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

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

Features

- Isolation voltage 3600 V~
- Planar glass passivated chips
- Low forward voltage drop
- Leads suitable for PC board soldering

Applications

- DC motor control
- Light and temperature control
- Softstart AC motor controller
- Solid state switches

Advantages

- Easy to mount with two screws
- Space and weight savings
- Improved temperature and power cycling
- High power density
- Small and light weight

Component

Symbol	Conditions	Characteristic Values min.	typ.	max.	
I_D, I_R	T_{VJ} = 125°C; $V_R = V_{RRM}$; $V_D = V_{DRM}$			5	mA
V_T	I_T = 300 A; T_{VJ} = 25°C			1.5	V
V_{TO}	For power-loss calculations only			0.8	V
r_T				2.4	mΩ
V_{GT}	V_D = 6 V; T_{VJ} = 25°C			1.5	V
	T_{VJ} = -40°C			1.6	V
I_{GT}	V_D = 6 V; T_{VJ} = 25°C			150	mA
	T_{VJ} = -40°C			200	mA
V_{GD}	T_{VJ} = 125°C; $V_D = {}^2/_3 V_{DRM}$			0.2	V
I_{GD}	T_{VJ} = 125°C; $V_D = {}^2/_3 V_{DRM}$			10	mA
I_L	T_{VJ} = 25°C; t_P = 10 ms I_G = 0.45 A; di_G/dt = 0.45 A/µs			450	mA
I_H	T_{VJ} = 25°C; V_D = 6 V; $R_{GK} = \infty$			200	mA
t_{gd}	T_{VJ} = 25°C; V_D = ½ V_{DRM} I_G = 0.45 A; di_G/dt = 0.45 A/µs			2	µs
R_{thJC}	per Thyristor; DC			0.26	K/W
	per module			0.13	K/W
R_{thCH}	per Thyristor; DC		0,2		K/W
	per module		0,1		K/W
d_S	Creeping distance on surface			11.2	mm
d_A	Creeping distance in air			5.0	mm
a	Max. allowable acceleration			50	m/s^2

Dimensions in mm (1 mm = 0.0394")