

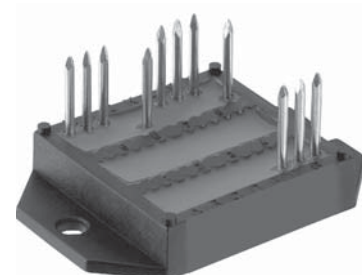
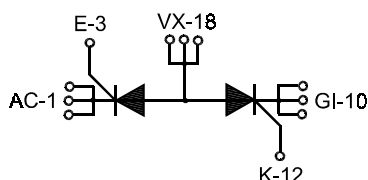
Thyristor Modules

ECO-PAC 2

$$\begin{aligned} I_{TRMS} &= 2 \times 180A \\ I_{TAVM} &= 2 \times 105A \\ V_{RRM} &= 800-1800V \end{aligned}$$

Preliminary Data

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



Symbol	Conditions	Maximum Ratings
I_{TRMS}		180 A
I_{TAVM}	$T_C = 85^\circ\text{C}$; 180° sine	105 A
I_{TSM}	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0\text{ V}$; $t = 10\text{ ms}$ (50 Hz), sine	2250 A
	$t = 8.3\text{ ms}$ (60 Hz), sine	2400 A
	$T_{VJ} = 125^\circ\text{C}$; $V_R = 0\text{ V}$; $t = 10\text{ ms}$ (50 Hz), sine	2000 A
	$t = 8.3\text{ ms}$ (60 Hz), sine	2150 A
I^2dt	$T_{VJ} = 45^\circ\text{C}$; $V_R = 0\text{ V}$; $t = 10\text{ ms}$ (50 Hz), sine	25300 A ² s
	$t = 8.3\text{ ms}$ (60 Hz), sine	23900 A ² s
	$T_{VJ} = 125^\circ\text{C}$; $V_R = 0\text{ V}$; $t = 10\text{ ms}$ (50 Hz), sine	20000 A ² s
	$t = 8.3\text{ ms}$ (60 Hz), sine	19100 A ² s
$(di/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$; $f = 50\text{ Hz}$; $t_p = 200\text{ }\mu\text{s}$; $V_D = \frac{2}{3}V_{DRM}$; $I_G = 0.45\text{ A}$; $di_G/dt = 0.45\text{ A}/\mu\text{s}$; repetitive, $I_T = 250\text{ A}$	150 A/ μs
	non repetitive, $I_T = I_{TAVM}$	500 A/ μs
$(dv/dt)_{cr}$	$T_{VJ} = 125^\circ\text{C}$; $V_{DR} = \frac{2}{3}V_{DRM}$; $R_{GK} = \infty$, method 1 (linear voltage rise)	1000 V/ μs
P_{GM}	$T_{VJ} = 125^\circ\text{C}$; $t_p = 30\text{ ms}$	$\leq 10\text{ W}$
	$I_T = I_{TAVM}$; $t_p = 300\text{ ms}$	$\leq 5\text{ W}$
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; $I_{ISOL} \leq 1\text{ mA}$; $t = 1\text{ min}$	3000 V ~
	$t = 1\text{ s}$	3600 V ~
M_d	Mounting torque (M4)	1.5 - 2.0 Nm
		14 - 18 lb.in.
Weight	typ.	26 g

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

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

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

