

## STANDARD THYRISTOR MODULE | 可控硅模块

### Features

- Base & chip insulation AC voltage 2500V
- International standard packing
- Excellent temperature feature
- $\geq 300A$  could chose water-cool
- Easy to install

### Explanation

- $I_{GT}, V_{GT}, I_H$  are all  $T_A=25^\circ C$  test data, others are all  $T_A=T_{jm}$  test data.
- $I^2t = I_{TSM}^2 \times t_w/2$ ;  $t_w$  = Half sine wave current, when at 50Hz,  
 $I^2t = 0.005 I_{TSM}^2 (A^2S)$
- When at 60Hz,  $I_{TSM}(8.3ms) = I_{TSM}(10ms) \times 1.066, T_j = T_{jm}$   
 $I^2t(8.3ms) = I^2t(10ms) \times 0.943, T_j = T_{jm}$

### Applications

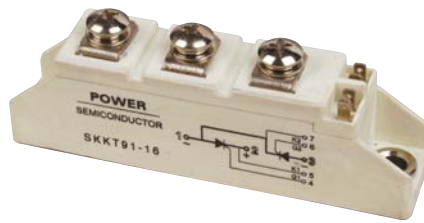
- AC DC motor control
- Motor soft start
- Industry heat-up control
- Rectificate power supply
- Welder
- Frequency transformer
- UPS power supply
- Battery charge & discharge

### Ordering Information Table

Device Code **M T C 55 -12 \***

① ② ③ ④ ⑤ ⑥

- 1 -Power Module
- 2 -T=thy-thy D=dio-dio F=dio-thy  
K=fast thy Z=fast dio H=fast thy-fast dio
- 3 -Circuit form:A=common positive pole  
C=series commection K=common negative pole  
X=reverse parallel connection
- 4 -Current Code= $I_{T(AV)}$
- 5 -Voltage code=Code  $\times 100 = V_{RRM}$
- 6 -None: Air-cool \* Means water-cool

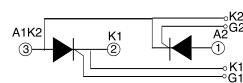


### STANDARD THYRISTOR MODULE 普通可控硅模块 (MTC, MTK, MTA, MTX, MT)

Type	$I_{T(AV)}$	$V_{DRM}$	$V_{RRM}$	$V_{TM@ITM}$	$I_{DRM}$	$I_{RRM}$	$I_{GT}$	$V_{GT}$	$I_H$	$dw/dt$	$di/dt$	$I_{TSM}$	$R_{jc}$	$T_{jm}$	$V_{iso}$	Outline
	A	V	V	A	mA	mA	mA	V	mA	V/ $\mu s$	A/ $\mu s$	$A \times 10^3$	$^\circ C/W$	$^\circ C$	V(AC)	
MTX25A	25	400-2600	1.69	80	8	100	2.5	100	800	50	0.55	0.950	125	2500	M1/M2	
MTX40A	40	400-2600	1.60	120	8	100	2.5	100	800	50	1.00	0.650	125	2500	M1/M2	
MTX55A	55	400-2600	1.50	170	8	100	2.5	100	800	50	1.25	0.530	125	2500	M1/M2	
MTX70A	70	400-2600	1.48	210	10	100	2.5	100	800	50	1.60	0.410	125	2500	M1/M2	
MTX90A	90	400-2600	1.94	270	15	100	2.5	100	800	100	2.00	0.280	125	2500	M1/M2	
MTX110A	110	400-2600	1.90	330	20	100	2.5	100	800	100	2.40	0.250	125	2500	M1/M2	
MTX130A	130	400-2600	1.96	410	25	150	2.5	100	800	100	3.80	0.200	125	2500	M2/M3	
MTX160A	160	400-2600	1.90	480	25	150	2.5	100	800	100	5.40	0.170	125	2500	M3	
MTX200A	200	400-2600	1.90	600	30	180	2.5	100	800	100	7.20	0.140	125	2500	M3/M4	
MTX250A	250	400-2600	1.73	750	30	180	2.5	100	800	100	8.50	0.120	125	2500	M4	
MTX300A	300	400-2600	1.58	900	40	180	2.5	100	800	100	9.30	0.100	125	2500	M4	
MTX350A	350	400-2600	1.45	1050	40	180	2.5	100	800	100	11.0	0.090	125	2500	M5	
MTX400A	400	400-2600	1.44	1200	40	200	3.0	100	800	100	14.0	0.080	125	2500	M5	
MTX500A	500	400-2600	1.44	1500	40	200	3.0	100	800	100	16.0	0.065	125	2500	M5	
MTX300A*	300	400-2600	1.60	900	40	180	2.5	100	800	100	9.30	0.100	125	2500	M6	
MTX500A*	500	400-2600	1.65	1500	40	200	3.0	100	800	100	11.0	0.087	125	2500	M7	
MTX600A*	600	400-2600	1.70	1800	40	200	3.0	100	800	100	13.0	0.073	125	2500	M7/M8	
MTX800A*	800	400-2600	1.75	2400	40	200	3.0	100	800	100	16.0	0.054	125	2500	M8	
MTX1000A*	1000	400-2600	1.95	3000	40	200	3.0	100	800	100	20.0	0.050	125	2500	M9	

\*Means water-cool

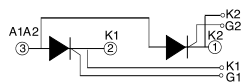
### Part number type & circuit



**ZENLI** MTC

**SEMIKRON** SKKT

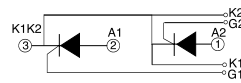
**IXYS** **VISHAY** IRKT/VSKT



MTA

SKKV

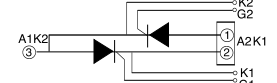
IRKV/VSKV



MTK

SKKU

IRKU/VSKU



MTX