

# Fast thyristor modules

Type	$V_{DRM}$ $V_{RRM}$ $V_{DSM} = V_{DRM}$ $V_{RSM} = V_{RRM} + 100 \text{ V}$ V	$I_{TRMSM}$	$I_{TSM}$ 10 ms, $t_{vj \text{ max}}$	$f_i^2 dt$ 10 ms, $t_{vj \text{ max}}$ A <sup>2</sup> s	$I_{TAVM}/t_C$ 180 °el sin. A/°C	$V_{(TO)}$ $t_{vj} =$ $t_{vj \text{ max}}$ V	$r_T$ $t_{vj} =$ $t_{vj \text{ max}}$ mΩ	$(di/dt)_{cr}$ DIN IEC 747-6 A/μs	$t_q$ μs	$(dv/dt)_{cr}$ DIN IEC 747-6 V/μs	$R_{thJC}$ 180 °el sin. °C/W	$R_{thCK}$ °C/W	$t_{vj \text{ max}}$ °C	Outline
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## Modules with soldered contacts

<ul style="list-style-type: none"> <li>■ TT 18 F</li> <li>■ TD 18 F</li> <li>■ DT 18 F</li> </ul>	800 1000 1100* 1200*	40	350	610	25/60 18/85	1,2	14	100	F ≤ 25 E ≤ 20 S ≤ 18 D* ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	1,2	0,2	125	
<ul style="list-style-type: none"> <li>■ TT 25 F</li> <li>■ TD 25 F</li> <li>■ DT 25 F</li> </ul>	800 1000 1100* 1200*	50	460	1060	32/71 25/85	1,20	8,0	100	F ≤ 25 E ≤ 20 S ≤ 18 D* ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,92	0,2	125	
<ul style="list-style-type: none"> <li>■ TT 32 F</li> <li>■ TD 32 F</li> <li>■ DT 32 F</li> </ul>	800 1000 1100* 1200*	80	850	3600	51/52 32/85	1,30	5,5	120	F ≤ 25 E ≤ 20 S ≤ 18 D* ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,72	0,16	125	
<ul style="list-style-type: none"> <li>■ TT 42 F</li> <li>■ TD 42 F</li> <li>■ DT 42 F</li> </ul>	800 1000 1100* 1200*	100	1000	5000	64/54 42/85	1,25	3,8	120	F ≤ 25 E ≤ 20 S ≤ 18 D* ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,6	0,16	125	

## Modules with compression bonding

<ul style="list-style-type: none"> <li>TT 46 F</li> <li>TD 46 F</li> <li>DT 46 F</li> </ul>	800 1000 1100 1200 1300*	120	1150	6600	76/48 46/85	1,30	3,4	120	F ≤ 25 E ≤ 20 D ≤ 15 C ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,52	0,16	125	
<ul style="list-style-type: none"> <li>■ TT 60 F</li> <li>■ TD 60 F</li> <li>■ DT 60 F</li> </ul>	800 1000 1100 1200 1300*	150	1300	8450	96/50 60/85	1,30	4,0	200	F ≤ 25 E ≤ 20 D ≤ 15 C ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,35	0,08	125	
<ul style="list-style-type: none"> <li>TT 71 F</li> <li>TD 71 F</li> <li>DT 71 F</li> </ul>	800 1000 1100 1200 1300 1400*	180	2100	22000	115/50 71/85	1,30	3,1	160	F ≤ 25 E ≤ 20	B = 50 C = 500 L = 500 M* = 1000	0,30	0,06	125	
<ul style="list-style-type: none"> <li>TT 81 F</li> <li>TD 81 F</li> <li>DT 81 F</li> </ul>	200 400 600 800	180	2200	24200	115/62 81/85	1,25	2,0	160	E ≤ 20 D ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,30	0,06	125	
<ul style="list-style-type: none"> <li>TT 101 F</li> <li>TD 101 F</li> <li>DT 101 F</li> </ul>	800 1000 1100 1200 1300 1400*	200	2400	28800	128/70 101/85	1,20	2,1	160	F ≤ 25 E ≤ 20	B = 50 C = 500 L = 500 M* = 1000	0,23	0,06	125	
<ul style="list-style-type: none"> <li>TT 111 F</li> <li>TD 111 F</li> <li>DT 111 F</li> </ul>	200 400 600 800	200	2600	33800	128/76 111/85	1,20	1,4	200	E ≤ 20 D ≤ 15 C* ≤ 12	B = 50 C = 500 L = 500 M* = 1000	0,23	0,06	125	
<ul style="list-style-type: none"> <li>TT 180 F</li> <li>TD 180 F</li> <li>DT 180 F</li> </ul>	800 1000 1100 1200 1300*	350	6000	180000	223/73 180/85	1,30	0,9	200	F ≤ 25 E ≤ 20 S ≤ 18	B = 50 C = 500 L = 500 M* = 1000	0,13	0,04	125	
<ul style="list-style-type: none"> <li>TT 200 F</li> <li>TD 200 F</li> <li>DT 200 F</li> </ul>	800 1000 1100 1200 1300*	410	6400	205000	261/68 200/85	1,20	0,75	200	F ≤ 25 E ≤ 20 S ≤ 18	B = 50 C = 500 L = 500 M* = 1000	0,13	0,04	125	
<ul style="list-style-type: none"> <li>▲ TZ 335 F</li> </ul>	800 1000 1100 1200 1300*	700	10000	500000	335/85 445/68	1,15	0,42	200	E = 20 F = 25 G = 30	C = 500 M = 1000	0,08	0,02	125	

Most types of the power module have been **UL**-recognized.

▲ New type ■ Not for new design

\* Delivery for large quantities on request