



FAST & INVERTER THYRISTORS SELECTOR GUIDE

| TYPE | VDRM / (4) VRRM max Tj = Tj max (V) | IDRM IRRM typical Tj = Tj max (mA) | IT(AV) at Tc | | ITSM (2) 1 pulse 8,3ms (kA) | I2t for fusing @8,3ms (kA2s) | Junction temperature range (°C) | Chip size (mm) | storage temp. (°C) | RthJC (3) (°C/W) | tq (4) typical Tj = Tj max (µs) | di/dt Min repetitive on-state (A/µs) | dV/dt Min Max Tj = Tj max (V/µs) | Vgt Max 25°C | Igt Max 25°C | PACKAGE INFORMATION | | | | |
|-----------------------------|---|--|--------------|------|--------------------------------------|--|--|----------------------|--------------------------|------------------------|---|--|--|--------------------|--------------------|---------------------|---------------|-------------------|---------------------------------------|---------------------------------------|
| | | | (A) | (°C) | | | | | | | | | | | | current code | Style | Outline | Max mounting force or torque | contact/ flange/ height (mm) |
| STUD THYRISTORS | | | | | | | | | | | | | | | | | | | | |
| Up to 1400V | | | | | | | | | | | | | | | | | | | | |
| T507--40 | 1400 | 15 | 40 | 70 | 40 | 1 | 4 | - 40 to 125 | 16 | - 40 to 150 | 0,28 | 10 to 50 | 100 | 200 | 3 | 150 | 15 Nm | 1/2"-20 Stud (1') | T50 | - |
| T507--70 | 1400 | 15 | 70 | 70 | 70 | 1,2 | 6 | - 40 to 125 | 16 | - 40 to 150 | 0,28 | 10 to 50 | 100 | 200 | 3 | 150 | 15 Nm | 1/2"-20 Stud (1') | T50 | - |
| T507--80 | 1400 | 15 | 80 | 70 | 80 | 1,4 | 8,1 | - 40 to 125 | 16 | - 40 to 150 | 0,28 | 10 to 50 | 150 | 200 | 3 | 150 | 15 Nm | 1/2"-20 Stud (1') | T50 | - |
| T607--13 | 1200 | 25 | 125 | 70 | 13 | 3,5 | 50 | - 40 to 125 | 23 | - 40 to 150 | 0,13 | 10 to 50 | 200 | 300 | 3 | 150 | 33 Nm | 3/4"-16 Stud (1') | T60 | - |
| T607--15 | 1200 | 25 | 150 | 70 | 15 | 4 | 65 | - 40 to 125 | 23 | - 40 to 150 | 0,13 | 10 to 50 | 250 | 300 | 3 | 150 | 33 Nm | 3/4"-16 Stud (1') | T60 | - |
| T607--18 | 1200 | 25 | 175 | 70 | 18 | 4,5 | 84 | - 40 to 125 | 23 | - 40 to 150 | 0,13 | 10 to 50 | 300 | 300 | 3 | 150 | 33 Nm | 3/4"-16 Stud (1') | T60 | - |
| T627--15 | 1200 | 25 | 150 | 70 | 15 | 3,5 | 50 | - 40 to 125 | 23 | - 40 to 150 | 0,08 | 10 to 50 | 200 | 300 | 3 | 150 | 4,5 to 6,3 kN | Press pak | T62 | 20/42/13,6 |
| T627--20 | 1200 | 25 | 200 | 70 | 20 | 4 | 65 | - 40 to 125 | 23 | - 40 to 150 | 0,08 | 10 to 50 | 250 | 300 | 3 | 150 | 4,5 to 6,3 kN | Press pak | T62 | 20/42/13,6 |
| T627--25 | 1200 | 25 | 250 | 70 | 25 | 4,5 | 84 | - 40 to 125 | 23 | - 40 to 150 | 0,08 | 10 to 50 | 300 | 300 | 3 | 150 | 4,5 to 6,3 kN | Press pak | T62 | 20/42/13,6 |
| T707--25 | 1200 | 30 | 250 | 70 | 25 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,1 | 25 to 60 | 300 | 300 | 3 | 150 | 39 Nm | 3/4"-16 Stud (1') | T70 | - |
| T707--28 | 1000 | 30 | 275 | 70 | 28 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,1 | 10 to 50 | 300 | 300 | 3 | 150 | 39 Nm | 3/4"-16 Stud (1') | T70 | - |
| T707--30 | 1400 | 30 | 300 | 70 | 30 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,1 | 25 to 60 | 400 | 300 | 3 | 150 | 39 Nm | 3/4"-16 Stud (1') | T70 | - |
| T707--33 | 800 | 30 | 325 | 70 | 33 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,1 | 10 to 50 | 400 | 300 | 3 | 150 | 39 Nm | 3/4"-16 Stud (1') | T70 | - |
| PRESS PAK THYRISTORS | | | | | | | | | | | | | | | | | | | | |
| Up to 800V | | | | | | | | | | | | | | | | | | | | |
| T727--40 | 800 | 30 | 400 | 70 | 40 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 10 to 50 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T727--48 | 800 | 30 | 475 | 70 | 48 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 10 to 50 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7S7--55 | 800 | 30 | 550 | 70 | 55 | 8,5 | 300 | - 40 to 125 | 33 | - 40 to 150 | 0,035 | 10 to 50 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T72H--40 | 800 | 35 | 400 | 70 | 40 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 10 to 20 | 500 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7S7--65 | 800 | 30 | 650 | 70 | 65 | 9,5 | 376 | - 40 to 125 | 33 | - 40 to 150 | 0,035 | 10 to 50 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T72H--48 | 800 | 35 | 475 | 70 | 48 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 20 to 40 | 600 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7SH--50 | 800 | 35 | 500 | 70 | 50 | 8,5 | 300 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 10 to 20 | 500 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T7SH--60 | 800 | 35 | 600 | 70 | 60 | 9 | 338 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 20 to 40 | 600 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| Up to 1400V | | | | | | | | | | | | | | | | | | | | |
| T7H6--49 | 1200 | 60 | 515 | 85 | 49 | 7,6@10ms Vr=0 | 289@10ms Vr=0 | - 40 to 125 | 30 | - 50 to 175 | 0,04 | 30 | - | 300 | 3 | 200 | 8,9to 10,7kN | Press pak (6) | T7H | 25/42/14,8 |
| T727--35 | 1400 | 30 | 350 | 70 | 35 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 15 to 60 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T727--45 | 1400 | 30 | 450 | 70 | 45 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 15 to 60 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7S7--50 | 1200 | 30 | 500 | 70 | 50 | 8 | 265 | - 40 to 125 | 33 | - 40 to 150 | 0,035 | 25 to 60 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T7S7--60 | 1200 | 30 | 600 | 70 | 60 | 9 | 338 | - 40 to 125 | 33 | - 40 to 150 | 0,035 | 15 to 60 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T72H--35 | 1200 | 35 | 350 | 70 | 35 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 10 to 50 | 500 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T72H--45 | 1400 | 35 | 450 | 70 | 45 | 7,5 | 234 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 25 to 50 | 600 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7SH--40 | 1200 | 35 | 400 | 70 | 40 | 8 | 267 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 10 to 50 | 500 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T7SH--45 | 1400 | 35 | 450 | 70 | 45 | 8,5 | 300 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 25 to 50 | 600 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T826--75 | 1200 | 70 | 970 | 55 | 75 | 11,7@10ms Vr=0 | 685@10ms Vr=0 | - 40 to 125 | 38 | - 50 to 175 | 0,025 | 20 | - | 300 | 3 | 200 | 13,3to 17,8kN | Press pak (6) | T82 | 35/60/26,4 |

| | | | | | | | | | | | | | | | | | | | | |
|----------|------|-----|------|----|----|-----------------|----------------|-------------|----|-------------|-------|----------|-----|-----|---|-----|-----------------|---------------|-----|------------|
| T82F--65 | 1200 | 45 | 650 | 70 | 65 | 8,5 | 300 | - 40 to 125 | 38 | - 40 to 150 | 0,037 | 15 to 50 | 400 | 400 | 3 | 200 | 16 to 18 kN | Press pak (5) | T82 | 35/60/26,4 |
| T82F--75 | 1200 | 45 | 750 | 70 | 75 | 10 | 416 | - 40 to 125 | 38 | - 40 to 150 | 0,037 | 25 to 60 | 500 | 400 | 3 | 200 | 16 to 18 kN | Press pak (5) | T82 | 35/60/26,4 |
| T9K6--09 | 1400 | 130 | 1180 | 55 | 09 | 16,15@10ms Vr=0 | 1300@10ms Vr=0 | - 40 to 125 | 50 | - 50 to 175 | 0,02 | 25 | - | 300 | 3 | 200 | 22,2 to 24,5kN | Press pak (6) | T9K | 47/75/27,7 |
| T9GH--10 | 1200 | 90 | 1000 | 70 | 10 | 15 | 937 | - 40 to 125 | 50 | - 40 to 150 | 0,023 | 20 to 60 | 500 | 400 | 3 | 300 | 22 to 25 kN | Press pak (5) | T9G | 47/75/26,7 |
| T9GH--11 | 1200 | 90 | 1100 | 70 | 11 | 17 | 1203 | - 40 to 125 | 50 | - 40 to 150 | 0,023 | 40 to 60 | 600 | 400 | 3 | 300 | 22 to 25 kN | Press pak (5) | T9G | 47/75/26,7 |
| C458-- | 1400 | 65 | - | - | - | 16 | 160 | - 40 to 125 | 50 | - 40 to 150 | 0,023 | 30 to 35 | 400 | 500 | 5 | 200 | 22,2 to 26,6 kN | Press pak (5) | T9G | 47/75/26,7 |

Up to 2000V

| | | | | | | | | | | | | | | | | | | | | |
|----------|------|-----|------|----|----|--------------|----------------|-------------|----|-------------|-------|-----------|-----|------|---|-----|-----------------|---------------|-----|------------|
| T72H--42 | 1800 | 35 | 420 | 70 | 42 | 6,8 | 192 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 80 to 100 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T72H--30 | 1800 | 35 | 300 | 70 | 30 | 7 | 205 | - 40 to 125 | 33 | - 40 to 150 | 0,06 | 40 to 60 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T72 | 35/60/26,4 |
| T7SH--36 | 1800 | 35 | 360 | 70 | 36 | 8 | 267 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 40 to 60 | 300 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| T7SH--46 | 1800 | 35 | 460 | 70 | 46 | 8,5 | 300 | - 40 to 125 | 33 | - 40 to 150 | 0,045 | 80 to 100 | 400 | 300 | 3 | 150 | 9 to 11 kN | Press pak | T7S | 30/49/14,4 |
| C612-- | 2000 | 45 | 600 | 70 | - | 9 | 336 | - 40 to 125 | 38 | - 40 to 150 | 0,045 | 55 to 60 | 200 | 200 | 5 | 150 | 16 to 18 kN | Press pak (5) | T82 | 35/60/26,4 |
| C613-- | 2000 | 45 | 550 | 70 | - | 6,5 | 175 | - 40 to 125 | 38 | - 40 to 150 | 0,045 | 45 to 50 | 200 | 400 | 5 | 180 | 16 to 18 kN | Press pak (5) | T82 | 35/60/26,4 |
| C712-- | 2000 | 90 | 1100 | 70 | - | 20 | 1660 | - 40 to 125 | 50 | - 40 to 125 | 0,023 | 55 | 200 | 500 | 5 | 200 | 22,2 to 26,6 kN | Press pak (5) | T9G | 47/75/26,7 |
| C713-- | 2000 | 60 | 1000 | 70 | - | 15 | 934 | - 40 to 125 | 50 | - 40 to 150 | 0,023 | 45 to 50 | 200 | 500 | 5 | 200 | 22,2 to 26,6 kN | Press pak (5) | T9G | 47/75/26,7 |
| C714-- | 2000 | 60 | 925 | 70 | - | 16 | 160 | - 40 to 125 | 50 | - 40 to 150 | 0,023 | 40 to 45 | 200 | 500 | 5 | 200 | 22,2 to 26,6 kN | Press pak (5) | T9G | 47/75/26,7 |
| C770-- | 2000 | 150 | 2100 | 70 | - | 33@10ms Vr=0 | 5444@10ms Vr=0 | - 40 to 125 | 77 | - 50 to 150 | 0,01 | 60 | 300 | 1000 | 4 | 250 | 40 to 44,5 kN | Press pak (5) | TB2 | 73/113/38 |

ORDERING INFORMATION

Select the complete part number you desire from the following table

| Type | Fast inverter thyristor | Voltage (V) | | Current (A) IF(AV) code | Turn off | | Igt max | | Leads code |
|------|-------------------------|-------------|------|--|----------|------|---------|------|--|
| | | VRRM | Code | | tq (µs) | code | mA | code | |
| T50 | 7 | 200 | 02 | select the current code in IFAV column | 8 | 9 | 100 | 5 | See our standard codes on drawings Other leads are available on request |
| T60 | 7 | 400 | 04 | | 10 | 8 | 120 | F | |
| T62 | 7 | " | " | | 12 | S | 150 | 4 | |
| T70 | 7 | 1000 | 10 | | 15 | 7 | 180 | G | |
| T7H | 6 | " | 10 | | 17 | U | 200 | 3 | |
| T72 | 7/H | " | " | | 20 | 6 | 250 | H | |
| T7S | 7/H | 1600 | 16 | | 25 | B | 300 | 2 | |
| T8K | 6 | " | " | | 30 | 5 | 350 | L | |
| T82 | F | " | " | | 35 | D | 500 | 1 | |
| T9K | 6 | " | " | | 40 | 4 | | | |
| T9G | H | 2000 | 20 | | 50 | 3 | | | |
| | | | | | 55 | J | | | |
| | | | | | 60 | 2 | | | |
| | | | | | 70 | C | | | |
| | | | | | 80 | 1 | | | |
| | | | | | 100 | K | | | |
| | | | | | 125 | M | | | |
| | | | | 150 | N | | | | |
| | | | | 175 | P | | | | |
| | | | | 200 | Q | | | | |
| | | | | 250 | R | | | | |

7 : center fired di/namic gate
6 : interdigitated, di/namic gate structure
F/H : interdigitated, di/namic gate structure

| Type | Voltage (V) | |
|------|-------------|------|
| | VRRM | Code |
| C612 | 600 | M |
| C613 | 800 | N |
| C458 | 1000 | P |
| C712 | 1200 | PB |
| C713 | 1400 | PD |
| C714 | 1600 | PM |
| C770 | 1800 | PN |
| | 2000 | L |

interdigitated, di/namic gate structure

Notes

- (1) = Available with metric thread on request
- (2) = 100% reapplied voltage
- (3) = DC Value
- (4) = Maximum voltage not always available with tq m
- (5) = Available with flat package T8A / T9A / TBT
- (6) = gold doped thyristor

Examples :

T507 12 80 75 AW

T50 : T50 case thread 1/2" (stud)
7 : fast thyristor
12 : VRRM/VDRM = 1200 V
80 : IF(AV) = 80 A
05 : tq=15µs; IGT max=100mA
AW : lead lenght 163 mm

T9GH1210B3KL

T9G : T9G case press pak
H : inverter thyristor
12 : VRRM/VDRM = 1200 V
10 : IF(AV) = 1000 A
B3 : tq=25µs; IGT max=200mA
KL : lead lenght 300 mm with eyelets

C770PN

C770 : TB2 case press pak, Inverter thyristor
PN : VRRM/VDRM=1800V