



## FAST & INVERTER THYRISTORS SELECTOR GUIDE

TYPE	IT(AV) at Tc			ITSM (2) 1 pulse 8,3ms (kA)	I <sub>2t</sub> for fusing @8,3ms (kA2s)	Junction temperature range (°C)	VDRM / (4) VRRM max T <sub>j</sub> = T <sub>j</sub> max (V)	IDRM IRRM typical T <sub>j</sub> = T <sub>j</sub> max (mA)	Chip size (mm)	storage temp. (°C)	R <sub>th</sub> JC (3) (°C/W)	t <sub>q</sub> (4) typical T <sub>j</sub> = T <sub>j</sub> max (μs)	di/dt Min repetitive on-state (A/μs)	dv/dt Min T <sub>j</sub> = T <sub>j</sub> max (V/μs)	V <sub>gt</sub> Max (V)	I <sub>gt</sub> Max (mA)	PACKAGE INFORMATION			
	(A)	(°C)	current code														Max mounting force or torque	Style	Outline	contact/ flange/ height (mm)
T507--40	40	70	40	1	4	-40 to 125	1400	15	16	-40 to 150	0.28	10 to 50	100	200	3	150	15 Nm	1/2"-20 Stud (1)	T50	-
T507--70	70	70	70	1.2	6	-40 to 125	1400	15	16	-40 to 150	0.28	10 to 50	100	200	3	150	15 Nm	1/2"-20 Stud (1)	T50	-
T507--80	80	70	80	1.4	8.1	-40 to 125	1400	15	16	-40 to 150	0.28	10 to 50	150	200	3	150	15 Nm	1/2"-20 Stud (1)	T50	-
T607--13	125	70	13	3.5	50	-40 to 125	1200	25	23	-40 to 150	0.13	10 to 50	200	300	3	150	33 Nm	3/4"-16 Stud (1)	T60	-
T607--15	150	70	15	4	65	-40 to 125	1200	25	23	-40 to 150	0.13	10 to 50	250	300	3	150	33 Nm	3/4"-16 Stud (1)	T60	-
T607--18	175	70	18	4.5	84	-40 to 125	1200	25	23	-40 to 150	0.13	10 to 50	300	300	3	150	33 Nm	3/4"-16 Stud (1)	T60	-
T627--15	150	70	15	3.5	50	-40 to 125	1200	25	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	200	70	20	4	65	-40 to 125	1200	25	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	250	70	25	4.5	84	-40 to 125	1200	25	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	250	70	25	7	205	-40 to 125	1200	30	33	-40 to 150	0.1	25 to 60	300	300	3	150	39 Nm	3/4"-16 Stud (1)	T70	-
T707--28	275	70	28	7	205	-40 to 125	1000	30	33	-40 to 150	0.1	10 to 50	300	300	3	150	39 Nm	3/4"-16 Stud (1)	T70	-
T707--30	300	70	30	8	265	-40 to 125	1400	30	33	-40 to 150	0.1	25 to 60	400	300	3	150	39 Nm	3/4"-16 Stud (1)	T70	-
T707--33	325	70	33	8	265	-40 to 125	800	30	33	-40 to 150	0.1	10 to 50	400	300	3	150	39 Nm	3/4"-16 Stud (1)	T70	-
T7H6--49	515	85	49	7.6@10ms Vr=0	289@10ms Vr=0	-40 to 125	1200	60	30	-50 to 175	0.04	30	-	300	3	200	8.9 to 10.7kN	Press pak (6)	T7H	25/42/14.8
T727--35	350	70	35	7	205	-40 to 125	1400	30	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--40	400	70	40	7	205	-40 to 125	800	30	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--45	450	70	45	8	265	-40 to 125	1400	30	33	-40 to 150	0.06	15 to 60	400	300	3	150	9 to 11 kN	Press pak	T72	35/60/26.4
T727--48	475	70	48	8	265	-40 to 125	800	30	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--50	500	70	50	8	265	-40 to 125	1200	30	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--55	550	70	55	8.5	300	-40 to 125	800	30	33	-40 to 150	0.035	10 to 50	300	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4
T7S7--60	600	70	60	9	338	-40 to 125	1200	30	33	-40 to 150	0.035	15 to 60	400	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4
T7S7--65	650	70	65	9.5	376	-40 to 125	800	30	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--30	300	70	30	7	205	-40 to 125	1800	35	33	-40 to 150	0.06	40 to 60	300	300	3	150	9 to 11 kN	Press pak	T72	35/60/26.4
T72H--35	350	70	35	7	205	-40 to 125	1200	35	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--40	400	70	40	7	205	-40 to 125	800	35	33	-40 to 150	0.06	10 to 20	500	300	3	150	9 to 11 kN	Press pak	T72	35/60/26.4
T72H--42	420	70	42	6.8	192	-40 to 125	1800	35	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--45	450	70	45	7.5	234	-40 to 125	1400	35	33	-40 to 150	0.06	25 to 50	600	300	3	150	9 to 11 kN	Press pak	T72	35/60/26.4
T72H--48	475	70	48	8	265	-40 to 125	800	35	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--36	360	70	36	8	267	-40 to 125	1800	35	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--40	400	70	40	8	267	-40 to 125	1200	35	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	450	70	45	8.5	300	-40 to 125	1400	35	33	-40 to 150	0.045	25 to 50	600	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4
T7SH--46	460	70	46	8.5	300	-40 to 125	1800	35	33	-40 to 150	0.045	80 to 100	400	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4

<b>T7SH--50</b>	500	70	50	8.5	300	- 40 to 125	800	35	33	- 40 to 150	0.045	10 to 20	500	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4
<b>T7SH--60</b>	600	70	60	9	338	- 40 to 125	800	35	33	- 40 to 150	0.045	20 to 40	600	300	3	150	9 to 11 kN	Press pak	T7S	30/49/14.4
<b>T826--75</b>	970	55	75	11.7@10ms Vr=0	685@10ms Vr=0	- 40 to 125	1200	70	38	- 50 to 175	0.025	20	-	300	3	200	13.3to 17.8kN	Press pak (6)	T82	35/60/26.4
<b>T82F--65</b>	650	70	65	8.5	300	- 40 to 125	1200	45	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
<b>T82F--75</b>	750	70	75	10	416	- 40 to 125	1200	45	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
<b>C612--</b>	600	70	-	9	336	- 40 to 125	2000	45	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
<b>C613--</b>	550	70	-	6.5	175	- 40 to 125	2000	45	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
<b>T9K6--09</b>	1180	55	09	6.15@10ms Vr=0	300@10ms Vr=0	- 40 to 125	1400	130	50	- 50 to 175	0.02	25	-	300	3	200	22.2to 24.5kN	Press pak (6)	T9K	47/75/27.7
<b>T9GH--10</b>	1000	70	10	15	937	- 40 to 125	1200	60	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
<b>T9GH--11</b>	1100	70	11	17	1203	- 40 to 125	1200	60	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
<b>C458--</b>	-	-	-	16	160	- 40 to 125	1400	65	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
<b>C712--</b>	1100	70	-	20	1660	- 40 to 125	2000	90	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
<b>C713--</b>	1000	70	-	15	934	- 40 to 125	2000	60	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
<b>C714--</b>	925	70	-	16	160	- 40 to 125	2000	60	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
<b>C770--</b>	2100	70	-	33@10ms Vr=0	444@10ms Vr=0	- 40 to 125	2000	150	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	8	9	100	5	See our standard codes on drawings Other leads are available on request
T60	7	400	04	current code	10	8	120	F	
T62	7	"	"	in IFAV	12	S	150	4	
T70	7	1000	10	column	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 n

(5) = Available with flat package T8A / T9A / TB2

(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 length 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 length 300 mm with eyelets

#### C770PN

C770 : TB2 case press pak, Inverter thyristor

PN : VRRM/VDRM=1800V