



PHASE CONTROL THYRISTORS SELECTOR GUIDE

TYPE	VDRM / VRRM max	IDRM IRRM typical	IT(AV) at Tc		ITSM (2)		I _{2t}	Junction temperature range	V ₀	r _t	storage temp.	R _{thJC} (3)	t _q	t _{on}	di/dt Min	dV/dt Min	V _{gt} Max	I _{gt} Max	PACKAGE INFORMATION			contact/flange/height
	T _j = T _j max (V)	T _j = T _j max (mA)	(A)	(°C)	code	(kA)	(kA2s)	(°C)	T _j = T _j max (V)	(m°)	(°C)	(°C/W)	T _j = T _j max (µs)	(µs)	repetitive (A/µs)	T _j = T _j max (V/µs)	(V)	(mA)	Mounting force or torque	Style	Outline	(mm)
T8K7-35	4500	75	350	76	35	5.06@10ms	128@10ms	-40 to 125	1,56	2,14	-40 to 150	0,04	250	td=2µs	150	500	3	200	13,3 to 15,5 kN	Press pak	T82	35/60/26,4
T9K7-08	4500	150	800	79	08	8@10ms	320@10ms	-40 to 125	1,213	0,6	-40 to 150	0,023	500	td=3µs	75	800	4,5	300	22,2 to 26,6 kN	Press pak (5)	T9G	47/75/26,7
TAK7-12	4400	250	1200	82	12	36,5@10ms	6660@10ms	-40 to 125	1,262	0,397	-40 to 150	0,015	500	td=4µs	150	1000	5	300	41 to 50 kN	Press pak	TAK	64/102/32,6
TAS7-16	4400	250	1650	70	16	20,74@10ms Vr=0	2150@10ms Vr=0	-40 to 125	1,39	0,401	-40 to 150	0,011	550	td=2,5µs	100	800	4,5	200	40 to 48,9 kN	Press pak	TAS	64/102/27
TBSD-21	4500	250	2115	70	21	31,7@10ms Vr=0	5020@10ms Vr=0	-40 to 125	1,13	0,275	-40 to 150	0,01	600	td=3,5µs	100	1000	4	250	40 to 44,5 kN	Press pak	TBS	73/113/26
TBKD-19	4500	250	1890	70	19	31,7@10ms Vr=0	5020@10ms Vr=0	-40 to 125	1,13	0,275	-40 to 150	0,012	600	td=3,5µs	100	1000	4	250	40 to 44,5 kN	Press pak	TB2	73/113/36
C784--	4500	300-200	1650	70	-	24@10ms	2880@10ms	-40 to 125	1,03	0,357	-40 to 150	0,012	400	td=3µs	100	1000	4,5	300	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
C783--	3700	150	1800	70	-	27@10ms	3645@10ms	-40 to 125	1,18	0,278	-40 to 150	0,012	200	td=3µs	100	500	4,5	250	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
TB20-16 +	4500	180	1600	70	-	22,5@10ms	2530@10ms	-40 to 125	1,38	0,33	-40 to 150	0,012	300	-	100	500	4,5	200	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
TB20-18 +	4500	180	1800	70	18	24@10ms	2880@10ms	-40 to 125	1,16	0,343	-40 to 150	0,012	300	-	100	500	4,5	200	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
TB20-20 +	3800	180	2000	70	20	27@10ms	3645@10ms	-40 to 125	1,18	0,27	-40 to 150	0,012	300	-	100	500	4,5	200	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
TB20-22 +	3800	180	2200	70	22	30@10ms	4500@10ms	-40 to 125	1,10	0,20	-40 to 150	0,012	300	-	100	500	4,5	200	40 to 44,5 kN	Press pak (5)	TB2	73/113/36
TC20-24	4400	300	2450	73	24	28,28@10ms Vr=0	4000@10ms Vr=0	-40 to 125	0,99	0,271	-50 to 150	0,009	500	td=1,5µs	100	1000	4,5	300	53 to 67 kN	Press pak	TC2	84/124/38
TDK4-30	4500	300	3070	70	30	52,8@10ms Vr=0	13900@10ms Vr=0	-40 to 125	0,991	0,196	-40 to 150	0,007	600	td=3µs	150	2000	4	300	80 to 110 kN	Press pak	TD2	100/144/38
TDS4-33	4500	300	3325	70	33	52,8@10ms Vr=0	13900@10ms Vr=0	-40 to 125	0,991	0,196	-40 to 150	0,007	600	td=3µs	150	2000	4	300	80 to 110 kN	Press pak	TDS	100/144/27
TDS4-36	4400	300	3585	55	36	52,8@10ms Vr=0	13900@10ms Vr=0	-40 to 125	0,991	0,196	-50 to 150	0,006	600	td=3µs	150	2000	4	300	80 to 110 kN	Press pak	TDS	100/144/27

Up to 6500V

T8KC-32	6500	100	325	70	32	4,24@10ms Vr=0	90@10ms	-40 to 125	1,17	3,26	-50 to 150	0,042	450	td=2µs	100	1000	3	200	13,3 to 15,5 kN	Press pak	T82	35/60/27
T9KC-06	6500	150	600	72	06	7,3@10ms Vr=0	267@10ms	-40 to 125	1,32	1,58	-50 to 150	0,023	600	td=2µs	100	1000	3	200	24,5 to 26,7 kN	Press pak	T9K	47/75/27,7
TAKC-11	6500	200	1100	70	11	11,3@10ms Vr=0	640@10ms Vr=0	-40 to 125	1,06	0,837	-40 to 150	0,015	650	td=3µs	100	1000	3	200	35,6 to 44,5 kN	Press pak	TAK	64/102/32,6
TBKC-12	6500	400	1250	70	12	20,7@10ms Vr=0	2150@10ms Vr=0	-40 to 125	1,15	0,744	-50 to 150	0,013	800	td=2,5µs	100	1000	5	300	40 to 44,5 kN	Press pak	TB2	73/113/38
TBSC-14	6500	400	1400	70	14	22,8@10ms Vr=0	2600@10ms Vr=0	-40 to 125	1,15	0,744	-50 to 150	0,01	800	td=2,5µs	100	1000	5	300	40 to 44,5 kN	Press pak	TBS	73/113/26

ORDERING INFORMATION

Select the complete part number you desire from the following table

Type	Voltage (V)		Current (A)	Turn off		I _{gt} max		Leads code
	VRRM	Code	IF(AV) code	t _q (µs)	code	mA	code	
T510	200	02	select the current code in IFAV column	No tq specified	0	100	5	See our standard codes on drawings Other leads are available on request
T500	400	04				120	F	
T610	"	"				150	4	
T600	1000	10				180	G	
T620	"	"				200	3	
T700	2500	25				250	H	
T720	"	"				300	2	
T7H0	4500	45				350	L	
T7S0	"	"				500	1	
T8K7	6500	65						
T820								
T9K7								
T9G0								
TAK7								
TA20								
TB20								
TBK7								
TBS7								
TD20								
TDS4								
TDK4								
TDS5								

Type	Voltage (V)	
	VRRM	Code
C180	600	M
C350	800	N
C380	1000	P
C390	1200	PB
C391	1400	PD
C430	1600	PM
C431 1	1800	PN
C431 2	2000	L
C440	2200	LB
C441	2400	LD
C450	2600	LM
C451	2800	LN
C702	3000	CP
C781	3200	CB
C782	3400	CD
C783	3600	CM
C784	3800	CN
	4000	DP
	4200	DB
	4400	DD
	4500	DE

Examples :

T500 12 80 05 AW

T50 : T50 case thread 1/2" (stud)
0 : Phase control thyristor
12 : VRRM/VDRM = 1200 V
80 : IF(AV) = 80 A
05 : no tq specified; IGT max=100mA
AW : lead length 163 mm

TA20 18 18 03 KL

TA2 : TA2 case press pak
0 : Phase control thyristor
18 : VRRM/VDRM = 1800 V
18 : IF(AV) = 1800 A
03 : no tq specified; IGT max=200mA
KL : lead length 300 mm with eyelets

C784DD

C784 : TB2 case press pak, Phase control thyristor
DD : VRRM/VDRM=4400V

Notes

- (1) = Available with metric thread on request
 - (2) =100% reapplied voltage
 - (3) = DC Value
 - (4) = glass metal seal
 - (5) = Available in flat package: T9A / TAA / TBT
- + Old version thyristor
* preliminary data sheet



PHASE CONTROL THYRISTORS SELECTOR GUIDE

TYPE	VDRM / VRRM	IDRM IRRM	IT(AV) at Tc		ITSM (2)	I2t	Junction	V0	rt	storage	RthJC	tq	ton	di/dt	dV/dt	Vgt	Igt	PACKAGE INFORMATION			contact/
	max Tj = Tj max (V)	typical Tj = Tj max (mA)	(A)	(°C)	1 pulse (kA)	for fusing (kA2s)	temperature range (°C)	Tj = Tj max (V)	(m*)	temp. (°C)	(°C/W)	typical Tj = Tj max (µs)	typical (µs)	Min repetitive (A/µs)	Min Tj = Tj max (V/µs)	Max 25°C (V)	Max 25°C (mA)	Mounting force or torque	Style	Outline	flange/ height (mm)

All values shown in this document are subject to change for product improvement. The information, diagrams and all other data included herein are believed to be correct and reliable.