THE DATASHEET OF

T410-600W

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SCRs, Triacs,
AC switches and A.S.D™

High commutation and voltage immunity for appliances, charging and industrial power switching

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Content

Product tree

Triacs						
	High Temperature	Standard	Logic Level	Snubberless™	AVS	
I_{TRMS} max	4 - 30 A	1 - 40 A	0.8 - 16 A	4 - 25 A	8 - 12 A	VBO min
V_{DRM}, V_{RRM}	600 - 800 V	600 - 800 V	600 - 800 V	600 - 1200 V	500 - 600 V	VBO max
I_{TSM} max	30 - 270 A	8 - 400 A	8 - 160 A	30 - 250 A	65 - 100 A	Tj max
I_{GT} max	10 - 50 mA	25 - 50 mA	3 - 50 mA	10 - 50 mA	5 - 10 mA	
T_j max	150 °C	125 °C	110 - 125 °C	125 °C	125 °C	
	3 or 4 quadrants		3 or 4 quadrants	3 quadrants		

SCR			
	High Temperature	Standard	Logic Level
I_{TRMS} max	12 - 80 A	6 - 50 A	0.8 - 12 A
V_{DRM}, V_{RRM}	600 - 1200 V	600 - 1200 V	600 - 800 V
I_{TSM} max	120 - 670 A	70 - 700 A	7 - 110 A
I_{GT} max	5 - 50 mA	5 - 80 mA	1 - 200 µA
T_j max	150 °C	125 °C	125 °C
	Automotive options		

AC Switches		
	ACS	
I_{TRMS} max	0.8 - 2 A	
V_{DRM}, V_{RRM}	600 - 800 V	70
I_{TSM} max	7.3 - 20 A	8
I_{GT} max	5 - 10 mA	1
T_j max	125 °C	12

ACST OVERVOLTAGE SELF-PROTECTED SWITCHES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT} (I, II, III)	Clamping voltage V_{CL} (@100 µA)	Rate of decrease of commutating on-state current (dI/dt)c min (@T_j max)	Rising ratio of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V)	min (A/ms)	min (V/µs)
ACST210-8	DPAK, TO-220FPAB	Overvoltage protected AC switch	2	800	8	125	10, 10, 10	850	0.5	500
ACST310-8	TO-220FPAB	Overvoltage protected AC switch	3	800	20	125	10, 10, 10	850	1	1000
ACST410-8	DPAK, TO-220FPAB	Overvoltage protected AC switch	4	800	30	125	10, 10, 10	850	2	500
ACST435-8	DPAK, TO-220FPAB	Overvoltage protected AC switch	4	800	30	125	35, 35, 35	850	5	1000
ACST610-8	D²PAK, TO-220AB, TO-220FPAB	Overvoltage protected AC switch	6	800	45	125	10, 10, 10	850	3.5	500
ACST830-8	D²PAK, TO-220AB, TO-220FPAB	Overvoltage protected AC switch	8	800	80	125	30, 30, 30	850	8	2000
ACST1010-7	TO-220AB, TO-220FPAB	Overvoltage protected AC switch	10	700	100	125	10, 10, 10	850	4.4	200
ACST1035-7	TO-220AB, TO-220FPAB	Overvoltage protected AC switch	10	700	100	125	35, 35, 35	850	12	2000
ACST1035-8	TO-220FPAB	Overvoltage protected AC switch	10	800	90	150	35, 35, 35	850	5	2000
ACST1210-7	D²PAK, TO-220AB	Overvoltage protected AC switch	12	700	120	125	10, 10, 10	850	5.3	200
ACST1235-7	D²PAK, TO-220AB	Overvoltage protected AC switch	12	700	120	125	35, 35, 35	850	14	2000
ACST1235-8	TO-220FPAB	Overvoltage protected AC switch	12	800	100	150	35, 35, 35	850	6	2000
ACST1635-8	TO-220FPAB	Overvoltage protected AC switch	16	800	140	150	35, 35, 35	850	4	300

ACS™ OVERVOLTAGE SELF-PROTECTED SWITCHES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT} (I, II, III)	Clamping voltage V_{CL} (@100 µA)	Rate of decrease of commutating on-state current (dI/dt)c min (@T_j max)	Rising ratio of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V)	min (A/ms)	min (V/µs)
ACS102-6T	SO-8, TO-92	Overvoltage protected AC switch	0.2	600	7.3	125	5, 5	650	0.15	300
ACS302-6	SO-20	Overvoltage protected triple AC switch (ACS™)	3 x 0.2	600	7.3	125	5, 5	650	0.15	300
ACS108-8T	SOT223	Overvoltage protected AC switch	0.8	800	13	125	5, 5	850	0.8	300
ACS108	SOT-223, TO-92	Overvoltage protected AC switch (ACS™)	0.8	800	13	125	10, 10	850	2	400
ACS108-8SUN	SMBFlat-3L	Overvoltage protected AC switch (ACS™)	0.8	800	13	125	10, 10	850	2	400
ACS110	SOT-223	Overvoltage protected AC switch	1	700	8	125	10, 10	750	0.5	500
ACS120	DPAK, TO-220AB, TO-220FPAB	Overvoltage protected AC switch	2	700	20	125	10, 10	750	1	500

Thyristors (SCRs)

HIGH-TEMPERATURE THYRISTORS (SCRS)

Part number	Package	Description	Thyristor, SCR type	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT}	Rising ratio of off voltage dV/dt (@T_j max)
				max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V/µs)
TN1205H-6	D²PAK, TO 220AB	High-temperature 12A SCRs	High-temperature SCR	12	600	120	150	5	100
TN1605H-6	TO220AB, TO220FPAB, D²PAK	High-temperature 16A SCRs	High-temperature SCR	16	600	140	150	6	200
TN1610H-6	TO220AB, TO220FPAB	High-temperature 16A SCRs	High-temperature SCR	16	600	140	150	10	1000
TN2010H-6	TO220AB, TO220FPAB, D²PAK	High-temperature 20A SCRs	High-temperature SCR	20	600	180	150	10	400
TN2015H-6	TO220T, TO220FPAB	High-temperature 20A SCRs	High-temperature SCR	20	600	180	150	15	750
TN4015H-6	D²PAK, TO220AB Ins, TO220T	High-temperature 40A SCRs	High-temperature SCR	40	600	360	150	15	500
TM8050H-8W	TO-247	High-temperature 80A SCRs	High-temperature SCR	80	800	670	150	50	1000
TM8050H-8D3	D3PAK-2L	High-temperature 80A SCRs	High-temperature SCR	80	800	670	150	50	1000
TN3050H-12GY(*)	D2PAK	High-temperature 30A SCRs	Automotive grade SCR	30	1200	300	150	50	1000
TN5050H-12WY	TO247	High-temperature 50A SCRs	Automotive grade SCR	50	1200	580	150	50	1000

Note: (*) Under development, ready in Q4/2016

STANDARD AND SENSITIVE THYRISTORS (SCRS)

Part number	Package	General description	Thyristor, SCR type	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT}	Rising ratio of off voltage dV/dt (@T_j max)
				max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V/µs)
Standard thyristors									
TYN606	TO-220AB	6 A Standard SCRs	Standard	6	600	70	125	15	200
TN805-600B	DPAK	8 A Standard SCRs	Standard	8	600	70	125	5	50
TN815-600B	DPAK	8 A Standard SCRs	Standard	8	600	70	125	15	150
TYN608	TO-220AB	8 A Standard SCRs	Standard	8	600	95	125	15	150
TN815-800B	DPAK	8 A Standard SCRs	Standard	8	800	70	125	15	150
TYN610	TO-220AB	10 A Standard SCRs	Standard	10	600	100	125	15	200
TYN810	TO-220AB	10 A Standard SCRs	Standard	10	800	100	125	15	200
TN1205T-600B	DPAK	12 A Standard SCRs	Standard	12	600	115	125	5	100
TYN612M	TO-220AB, TO-220FPAB	12 A Standard SCRs	Standard	12	600	120	125	5	50
TXN612	TO-220AB Ins	12 A Standard SCRs	Standard	12	600	120	125	15	200
TYN612	TO-220AB	12 A Standard SCRs	Standard	12	600	140	125	15, 5	40
TN1215	D²PAK, DPAK, IPAK	12 A Standard SCRs	Standard	12	800	140	125	15	200
TYN812	TO-220AB	12 A Standard SCRs	Standard	12	800	140	125	15, 5	40
TYN1012	TO-220AB	12 A Standard SCRs	Standard	12	1000	140	125	15, 5	40
TYN1212	TO-220AB	12 A Standard SCR	Standard	12	1200	120	125	15	200
TN1515-600B	DPAK	15 A Standard SCRs	Standard	15	600	150	125	15	200
TXN616B	TO-220AB Ins	16 A Standard SCRs	Standard	16	600	155	125	15	200
TYN616	TO-220AB	16 A Standard SCRs	Standard	16	600	190	125	25	500
TYN816	TO-220AB	16 A Standard SCRs	Standard	16	600	190	125	25	500
TYN816	TO-220AB	16 A Standard SCRs	Standard	16	800	190	125	25	500
TN1625-1000G	D²PAK	16 A Standard SCRs	Standard	16	1000	190	125	25	500
TXN625	TO-220AB Ins	25 A Standard SCRs	Standard	25	600	300	125	40	1000

STANDARD AND SENSITIVE THYRISTORS (SCRS)

Part number	Package	General description	Thyristor, SCR type	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT}	Rising ratio of off voltage dV/dt (@T_j max)
				max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V/µs)
TYN625	TO-220AB	25 A Standard SCRs	Standard	25	600	300	125	40	1000
TN2540	D²PAK	25 A Standard SCRs	Standard	25	800	300	125	40	1000
TYN825	TO-220AB	25 A Standard SCRs	Standard	25	800	300	125	40	1000
TYN1225	TO-220AB	25 A Standard SCR	Standard	25	1200	300	125	40	1000
BTW68-600	TOP 3 ISOL	30 A StandardSCRs	Standard	30	600	400	125	50	500
BTW68-800	TOP 3 ISOL	30 A StandardSCRs	Standard	30	800	400	125	50	500
BTW68	TOP 3 ISOL	30 A StandardSCRs	Standard	30	1200	400	125	50	500
TYN640	TO-220AB	40 A Standard SCRs	Standard	40	600	460	125	35	1000
TYN840	TO-220AB	40 A Standard SCRs	Standard	40	800	460	125	35	1000
BTW67-600	RD-91	50 A Standard SCRs	Standard	50	600	580	125	80	1000
BTW69-600	TOP 3 ISOL	50 A Standard SCRs	Standard	50	600	580	125	80	1000
BTW69-800	TOP 3 ISOL	50 A Standard SCRs	Standard	50	800	580	125	80	1000
BTW67-1000	RD-91	50 A Standard SCRs	Standard	50	1000	580	125	80	1000
BTW69-1000	TOP 3 ISOL	50 A Standard SCRs	Standard	50	1000	580	125	80	1000
BTW69-1200N	TOP 3	50 A Standard SCRs	Standard	50	1200	700	125	50	1000
Sensitive thyristors									
XL0840	TO-92	0.8 A Sensitive gate SCRs	Logic level	0.8	400	7	125	0.2	75
P011XX	SOT-223, TO-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	7	125	0.05, 0.025	75
P010XX	SOT-223, SOT-23, TO-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	7	125	0.001, 0.2	100, 200
X006	TO-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	9	125	0.2	25
X00619	SOT-223, TO-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	9	125	0.2	40
X02	SMBflat-3L, SOT-223, TO-92	1.25 A Sensitive gate SCRs	Logic level	1.25	600, 800	22.5	125	0.05, 0.2	15, 10

STANDARD AND SENSITIVE THYRISTORS (SCRS)

Part number	Package	General description	Thyristor, SCR type	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering gate current I_{GT}	Rising ratio of off voltage dV/dt (@T_j max)
				max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V/µs)
X04	TO-202-3	4 A Sensitive gate SCRs	Logic level	4	600, 800	30	125	0.05, 0.2	15, 10
TS420	DPAK, IPAK, TO-220AB	4 A Sensitive gate SCRs	Logic level	4	600	30	125	0.2	5
TS820	DPAK, IPAK, TO-220AB, TO-220FPAB	8 A Sensitive gate SCRs	Logic level	8	600	70	125	0.2	5
TS1220	DPAK, IPAK, TO-220AB, TO-220FPAB	12 A Sensitive gate SCRs	Logic level	12	600	110	125	0.2	5
High voltage sensitive thyristors									
TS110-7	SMBflat-3L, TO-92	High surge voltage 1.25 A SCR for circuit breaker	Logic level, 1250 V surge voltage for circuit breakers	1.25	700	25	125	0.1	15
TS110-8	SMBflat-3L, TO-92, SO8	High surge voltage 1.25 A SCR for circuit breaker	Logic level, 1250 V surge voltage for circuit breakers	1.25	800	20	125	0.1	200

Thyristor application-specific discretes (ASD®)

APPLICATION-SPECIFIC IGNITORS

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive surge peak onstate current (I_{TRM})	Peak repeat off voltage (V_{DRM})	Peak repeat reverse voltage (V_{RRM})	Breakover voltage (V_{BO})	Breakover voltage (V_{BO})	Junction temperature (T_j)	Critical rate of rise of on-state current (dI/dt)
			max (A)	typ (A)	max (V)	max (V)	min (V)	max (V)	max (°C)	max (A/µs)
FLC01	DPAK, IPAK	Fire lighter circuit	-	190	200	-	206	233	125	120
FLC10	DPAK	Fire lighter circuit	-	240	20	-	200	250	125	200
FLC21	TO-92	Low power fire lighter circuit	-	90	135	135	140	160	125	50
LIC01	DPAK, IPAK	Light ignition circuit	1.2	50	180	180	195	215	125	80
P0130	TO-92	0.8 A SCRs	0.8	7	100	100	-	-	125	50
TN22	IPAK, TO-220AB	Starlight	2	20	400	400	1200	1500	110	50

HIGH-TEMPERATURE TRIACS T-SERIES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Gate triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
T435T-600FP	TO-220FPAB	4-Amp Snubberless™ Triacs	4	600	30	125	I, II, III	35, 35, 35	5.3	750
T610T-8FP	TO-220FPAB	6-Amp Triacs - Logic Level gate	6	800	45	150	I, II, III	10, 10, 10	3.7(2)	170
T610T-8T	TO-220AB	6-Amp Triacs - Logic Level gate	6	800	45	150	I, II, III	10, 10, 10	3.7(2)	170
T635T-8FP	TO-220FPAB	6-Amp Snubberless™ Triac	6	800	45	150	I, II, III	35, 35, 35	3	1000(1)
T635T-8T	TO-220AB	6-Amp Snubberless™ Triac	6	800	45	150	I, II, III	35, 35, 35	3	1000(1)
T810T-6I	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	10, 10, 10	2.5(2)	50(1)
T810T-8FP	TO-220FPAB	8-Amp Snubberless™ Triacs	8	800	60	150	I, II, III	10, 10, 10	4.2(2)	170
T810T-8T	TO-220AB	8-Amp Snubberless™ Triacs	8	800	60	150	I, II, III	10, 10, 10	4.2(2)	170
T820T-6I	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	20, 20, 20	2(2)	500(1)
T825T-6I	TO-220AB Ins	8-Amp 4-quadrant Standard Triacs	8	600	60	125	I, II, III, IV	25, 25, 25, 40	2(2)	300(1)
T830-8FP	TO-220FPAB	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	30, 30, 30	10	2500
T835T-6I	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	35, 35, 35	6.5(2)	1000(1)
T835T-8FP	TO-220FPAB	8-Amp Snubberless™ Triac	8	800	60	150	I, II, III	35, 35, 35	4	1000(1)
T835T-8T	TO-220AB	8-Amp Snubberless™ Triac	8	800	60	150	I, II, III	35, 35, 35	4	1000(1)
T1210T-6I	TO-220AB Ins	12-Amp 3-quadrant Logic Level Triacs	12	600	90	125	I, II, III	10, 10, 10	3(2)	50(1)
T1220T-6I	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	90	125	I, II, III	20, 20, 20	3(1)	500(1)
T1225T-6I	TO-220AB Ins	12-Amp 4-quadrant Standard Triacs	12	600	90	125	I, II, III, IV	25, 25, 25, 40	3(1)	50(1)
T1235T-6I	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	90	125	I, II, III	35, 35, 35	10(1)	1000(1)
T1210T-8FP	TO-220FPAB	12-Amp 3-quadrant Logic Level Triacs	12	800	90	150	I, II, III	10, 10, 10	2.7	170

HIGH-TEMPERATURE TRIACS T-SERIES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Gate triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
T1210T-8T	TO-220AB	12-Amp 3-quadrant Logic Level Triacs	12	800	90	150	I, II, III	10, 10, 10	2.7	170
T1235T-8FP	TO-220FPAB	12-Amp Snubberless™ Triac	12	800	100	150	I, II, III	35, 35, 35	6	1000(1)
T1235T-8T	TO-220AB	12-Amp Snubberless™ Triac	12	800	100	150	I, II, III	35, 35, 35	6	1000(1)
T1610T-6I	TO-220AB Ins	16-Amp 3-quadrant Logic Level Triacs	16	600	120	125	I, II, III	10, 10, 10	3(2)	20(1)
T1620T-6I	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	120	125	I, II, III	20, 20, 20	3(1)	500(1)
T1635T-6I	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	120	125	I, II, III	35, 35, 35	12(1)	1000(1)
T1610T-8I	TO-220AB Ins	16-Amp 3-quadrant Logic Level Triac	16	800	120	150	I, II, III	10, 10, 10	5.4(2)	50
T1610T-8FP	TO-220FPAB	16-Amp 3-quadrant Logic Level Triacs	16	800	120	150	I, II, III	10, 10, 10	15(2)	170
T1610T-8T	TO-220AB	16-Amp 3-quadrant Logic Level Triacs	16	800	120	150	I, II, III	10, 10, 10	15(2)	170
T1620T-8I	TO-220AB Ins	Snubberless™ 16-Amp Triac	16	800	120	150	I, II, III	20, 20, 20	4.5	500
T1625T-8I	TO-220AB Ins	16-Amp 4-quadrant Standard Triac	16	800	120	150	I, II, III, IV	25, 25, 25, 50	6(2)	300
T1635T-8I	TO-220AB Ins	Snubberless™ 16-Amp Triac	16	800	120	150	I, II, III	35, 35, 35	12(2)	1000
T1635T-8FP	TO-220FPAB	16-Amp Snubberless™ Triac	16	800	120	150	I, II, III	35, 35, 35	8	1000
T1635T-8T	TO-220AB	16-Amp Snubberless™ Triac	16	800	120	150	I, II, III	35, 35, 35	8	1000

Note (1) : parameter at 150 °C ;
Note (2) : parameter at 0.1 V/us and 150 °C

HIGH-TEMPERATURE TRIACS H-SERIES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
T410H	TO 220AB	4-Amp sensitive Triacs - Logic Level	4	600	40	150	I, II, III	10, 10, 10	1.5(1)	75
T610H	TO 220AB	6-Amp sensitive Triacs - Logic Level	6	600	60	150	I, II, III	10, 10, 10	2.3(1)	75
T810H	D²PAK, TO-220AB	8-Amp sensitive Triacs - Logic Level	8	600	80	150	I, II, III	10, 10, 10	3(1)	75
T835H	D²PAK, TO-220AB, TO-220AB Ins	8-Amp Triacs - Snubberless™	8	600	80	150	I, II, III	35, 35, 35	11	1000
T850H	D²PAK, TO-220AB, TO-220AB Ins	8-Amp Triacs - Snubberless™	8	600	80	150	I, II, III	50, 50, 50	14	1500
T1010H	D²PAK, TO-220AB	10-Amp sensitive gate Triacs - Logic Level	10	600	100	150	I, II, III	10, 10, 10	3.8(1)	75
T1035H	D²PAK, TO-220AB, TO-220AB Ins	10-Amp Triacs - Snubberless™	10	600	100	150	I, II, III	35, 35, 35	13	1000
T1050H	D²PAK, TO-220AB, TO-220AB Ins	10-Amp Triacs - Snubberless™	10	600	100	150	I, II, III	50, 50, 50	18	1500
T1235H	D²PAK, TO-220AB, TO-220AB Ins	12-Amp Triacs - Snubberless™	12	600	120	150	I, II, III	10, 10, 10	16	1000
T1250H	D²PAK, TO-220AB, TO-220AB Ins	12-Amp Triacs - Snubberless™	12	600	120	150	I, II, III	50, 50, 50	21	1500
T1610H	TO-220AB	16-Amp Triacs - Logic Level	16	600	160	150	I, II, III	10, 10, 10	3(1)	100
T1635H	D²PAK, TO-220AB, TO-220AB Ins	16-Amp Triacs - Snubberless™	16	600	160	150	I, II, III	35, 35, 35	21	1000
T1650H	D²PAK, TO-220AB, TO-220AB Ins	16-Amp Triacs - Snubberless™	16	600	160	150	I, II, III	50, 50, 50	28	1500
T2035H	D²PAK, TO-220AB, TO-220AB Ins	20-Amp Triacs - Snubberless™	20	600	200	150	I, II, III	35, 35, 35	27	1000
T2050H	TO-220AB	20-Amp Triacs - Snubberless™	20	600	200	150	I, II, III	50, 50, 50	36	1500
T3035H	TO-220AB, TO-220AB Ins	30-Amp Triacs - Snubberless™	30	600	270	150	I, II, III	35, 35, 35	33	1000
T3050H	TO-220AB, TO-220AB Ins	30-Amp Triacs - Snubberless™	30	600	270	150	I, II, III	50, 50, 50	44	1500

Note (1) Parameter at 10 V/µs

STANDARD AND SNUBBERLESS™ TRIACS, 0.8 A - 1 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of rise of turn off voltage (dV/dt)c min (@T_j max)	Rising ratio of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (V/µs)	min (V/µs)
Z00607	TO-92	0.8-Amp Logic Level Triacs	0.8	600	9	110	I, II, III, IV	5, 5, 5, 7	0.35	10
Z0103M	SMBflat-3L, SOT-223, TO-92	1-Amp Logic Level Triacs	1	600	8	125	I, II, III, IV	3, 3, 3, 5	0.44	10
Z0107M	SMBflat-3L, SOT-223, TO-92	1-Amp Logic Level Triacs	1	600	8	125	I, II, III, IV	5, 5, 5, 7	0.44	20
Z0109M	SMBflat-3L, SOT-223, TO-92	1-Amp Logic Level Triacs	1	600	8	125	I, II, III, IV	10, 10, 10, 10	0.44	50
Z0109M1	SO-8	1-Amp Logic Level Triacs	1	600	8	125	I, II, III, IV	10, 10, 10, 10	0.44	50
Z0110M	SOT-223, TO-92	1-Amp Standard Triacs	1	600	8	125	I, II, III, IV	25, 25, 25, 25	0.44	100
Z0103N	SOT-223, TO-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	3, 3, 3, 5	0.44	10
Z0107N	SOT-223, TO-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	5, 5, 5, 7	0.44	20
Z0109N	SOT-223, TO-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	10, 10, 10, 10	0.44	50
Z0110N	SOT-223, TO-92	1-Amp Standard Triacs	1	800	8	125	I, II, III, IV	25, 25, 25, 25	0.44	100

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
4 A Standard, Logic Level and Snubberless™ Triacs										
Z0402MF	TO-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	3, 3, 3, 3	0.5	10
Z0405MF	TO-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	5, 5, 5, 5	1	20
Z0409MF	TO-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	10, 10, 10, 10	2	100
Z0410MF	TO-202-3	4-Amp Standard Triacs	4	600	20	125	I, II, III, IV	25, 25, 25, 25	5	200
T405-600	DPAK, IPAK, TO-220AB	4-Amp Logic Level Triacs	4	600	30	125	I, II, III	5, 5, 5	0.9	20

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
T410-600	DPAK, IPAK, TO-220AB	4-Amp Logic Level Triacs	4	600	30	125	I, II, III	10, 10, 10	2	40
T405Q-600	DPAK, IPAK	4-Amp Logic Level Triacs	4	600	35	125	I, II, III, IV	5, 5, 5, 10	1.8	10
T435-600	DPAK, IPAK, TO-220AB	4-Amp Snubberless™ Triacs	4	600	35	125	I, II, III	35, 35, 35	2.5	400
BTB04-600SL	TO-220AB	4-Amp Standard Triacs	4	600	35	125	I, II, III, IV	10, 10, 10, 25	1.8	75
Z0402NF	TO-202-3	4-Amp Logic Level Triacs	4	800	20	125	I, II, III, IV	3, 3, 3, 3	0.5	10
Z0405NF	TO-202-3	4-Amp Logic Level Triacs	4	800	20	125	I, II, III, IV	5, 5, 5, 5	1	20
Z0409NF	TO-202-3	4-Amp Logic Level Triacs	4	800	20	125	I, II, III, IV	10, 10, 10, 10	2	100
Z0410NF	TO-202-3	4-Amp Standard Triacs	4	800	20	125	I, II, III, IV	25, 25, 25, 25	5	200
T405-800	DPAK, IPAK	4-Amp Logic Level Triacs	4	800	30	125	I, II, III	5, 5, 5	0.9	20
T410-800	DPAK, IPAK, TO-220AB	4-Amp Logic Level Triacs	4	800	30	125	I, II, III	10, 10, 10	2	40
T435-800	DPAK, IPAK, TO-220AB	4-Amp Snubberless™ Triacs	4	800	30	125	I, II, III	35, 35, 35	2.5	400
6 A Standard, Logic Level and Snubberless™ Triacs										
BTB06-600TW	TO-220AB	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	5, 5, 5	1.2(2)	20
BTA06-600TW	TO-220AB Ins	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	5, 5, 5	1.2(2)	20
BTB06-600SW	TO-220AB	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	10, 10, 10	2.4(2)	40
BTA06-600SW	TO-220AB Ins	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	10, 10, 10	2.4(2)	40
BTB06-600C	TO-220AB	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	25, 25, 25, 50	2.7(2)	200
BTA06-600C	TO-220AB Ins	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	25, 25, 25, 50	2.7(2)	200
BTB06-600CW	TO-220AB	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	35, 35, 35	3.5	400
BTA06T-600CWRG	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	600	45	125	I, II, III	35, 35, 35	8	750
BTA06-600CW	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	35, 35, 35	3.5	400
BTB06-600BW	TO-220AB	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	50, 50, 50	5.3	1000

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTA06-600BW	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	50, 50, 50	5.3	1000
BTB06-600B	TO-220AB	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	50, 50, 50, 100	2.7(2)	400
BTA06-600B	TO-220AB Ins	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	50, 50, 50, 100	2.7(2)	400
BTB06-800TW	TO-220AB	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	5, 5, 5	1.2(2)	20
BTA06-800TW	TO-220AB Ins	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	5, 5, 5	1.2(2)	20
BTB06-800SW	TO-220AB	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	10, 10, 10	2.4(2)	40
BTA06-800SW	TO-220AB Ins	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	10, 10, 10	2.4(2)	40
BTB06-800C	TO-220AB	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	25, 25, 25, 50	2.7(1)	200
BTA06-800C	TO-220AB Ins	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	25, 25, 25, 50	2.7(1)	200
BTB06-800CW	TO-220AB	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	35, 35, 35	3.5	400
BTA06-800CW	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	35, 35, 35	3.5	400
BTB06-800BW	TO-220AB	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	50, 50, 50	5.3	1000
BTA06-800BW	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	50, 50, 50	5.3	1000
BTB06-800B	TO-220AB	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	50, 50, 50, 100	2.7(2)	400
BTA06-800B	TO-220AB Ins	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	50, 50, 50, 100	2.7(2)	400
8 A Standard, Logic Level and Snubberless™ Triacs										
BTB08-600TW	TO-220AB	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	5, 5, 5	1.5(1)	20
BTA08-600TW	TO-220AB Ins	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	5, 5, 5	1.5(1)	20
BTB08-600SW	TO-220AB	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	3(1)	40
BTA08-600SW	TO-220AB Ins	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	3(1)	40
T810-600	D2PAK, IPAK	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	2.8	40
BTB08-600C	TO-220AB	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTA08-600C	TO-220AB Ins	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTB08-600CW	TO-220AB	8-Amp Snubberless™ Triacs	8	600	80	125	I, II, III	35, 35, 35	4.5	400
BTA08-600CW	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	80	125	I, II, III	35, 35, 35	4.5	400
T835-600	D2PAK	8-Amp Snubberless™ Triacs	8	600	80	125	I, II, III	35, 35, 35	4.5	400
BTB08-600BW	TO-220AB	8-Amp Snubberless™ Triacs	8	600	80	125	I, II, III	50, 50, 50	7	1000
BTA08-600BW	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	80	125	I, II, III	50, 50, 50	7	1000
BTB08-600B	TO-220AB	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
BTA08-600B	TO-220AB Ins	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
BTB08-800TW	TO-220AB	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	5, 5, 5	1.5(1)	20
BTA08-800TW	TO-220AB Ins	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	5, 5, 5	1.5(1)	20
BTB08-800SW	TO-220AB	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	10, 10, 10	3(1)	40
BTA08-800SW	TO-220AB Ins	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	10, 10, 10	3(1)	40
T810-800B	DPAK	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	10, 10, 10	2.8	40
BTB08-800C	TO-220AB	8-Amp Standard Triacs	8	800	80	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTA08-800C	TO-220AB Ins	8-Amp Standard Triacs	8	800	80	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTB08-800CW	TO-220AB	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	35, 35, 35	4.5	400
BTA08-800CW	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	35, 35, 35	4.5	400
T835-800B	DPAK	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	35, 35, 35	4.5	400
BTB08-800BW	TO-220AB	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	50, 50, 50	7	1000
BTA08-800BW	TO-220AB Ins	8-Amp Logic Level Triacs	8	800	80	125	I, II, III	50, 50, 50	7	1000
BTB08-800B	TO-220AB	8-Amp Standard Triacs	8	800	80	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
BTA08-800B	TO-220AB Ins	8-Amp Standard Triacs	8	800	80	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
10 A Standard, Logic Level and Snubberless™ Triacs										
BTB10-600C	TO-220AB	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	25, 25, 25, 50	4.4(2)	200
BTA10-600C	TO-220AB Ins	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	25, 25, 25, 50	4.4(2)	200
BTB10-600CW	TO-220AB	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	35, 35, 35	5.5	1000
BTA10-600CW	TO-220AB Ins	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	35, 35, 35	5.5	1000
BTA10-600BW	TO-220AB Ins	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	50, 50, 50	9	1000
BTB10-600BW	TO-220AB	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	50, 50, 50	9	1000
BTB10-600B	TO-220AB	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	50, 50, 50, 100	4.4(2)	400
BTA10-600B	TO-220AB Ins	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	50, 50, 50, 100	4.4(2)	400
BTA10-600GP	TO-220AB Ins	10-Amp Standard Triacs	10	600	120	125	I, II, III, IV	25, 25, 25, 100	2.2	30
BTB10-800C	TO-220AB	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	25, 25, 25, 50	4.4(2)	200
BTA10-800C	TO-220AB Ins	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	25, 25, 25, 50	4.4(2)	200
BTB10-800CW	TO-220AB	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	35, 35, 35	5.5	1000
BTA10-800CW	TO-220AB Ins	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	35, 35, 35	5.5	1000
BTB10-800BW	TO-220AB	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	50, 50, 50	9	1000
BTA10-800BW	TO-220AB Ins	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	50, 50, 50	9	1000
BTB10-800B	TO-220AB	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	50, 50, 50, 100	4.4(2)	400
BTA10-800B	TO-220AB Ins	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	50, 50, 50, 100	4.4(2)	400
12 A Standard, Logic Level and Snubberless™ Triacs										
BTB12-600TW	TO-220AB	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	5, 5, 5	1(1)	20
BTA12-600TW	TO-220AB Ins	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	5, 5, 5	1(1)	20
BTA12-600SW	TO-220AB Ins	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	10, 10, 10	2.9(1)	40
BTB12-600SW	TO-220AB	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	10, 10, 10	2.9(1)	40

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTB12-600C	TO-220AB	12-Amp Standard Triacs	12	600	120	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTA12-600C	TO-220AB Ins	12-Amp Standard Triacs	12	600	120	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
T1235-600G	D²PAK	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	35, 35, 35	6.5	500
BTB12-600CW	TO-220AB	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	35, 35, 35	6.5	500
BTA12-600CW	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	35, 35, 35	6.5	500
T1250-600G	D²PAK	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	50, 50, 50	12	1000
BTB12-600BW	TO-220AB	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	50, 50, 50	12	1000
BTA12-600BW	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	120	125	I, II, III	50, 50, 50	12	1000
BTB12-600B	TO-220AB	12-Amp Standard Triacs	12	600	120	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
BTA12-600B	TO-220AB Ins	12-Amp Standard Triacs	12	600	120	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
BTB12-800TW	TO-220AB	12-Amp Logic Level Triacs	12	800	120	125	I, II, III	5, 5, 5	1(1)	20
BTA12-800TW	TO-220AB Ins	12-Amp Logic Level Triacs	12	800	120	125	I, II, III	5, 5, 5	1(1)	20
T1210-800G	D²PAK	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	10, 10, 10	2.9	40
BTB12-800SW	TO-220AB	12-Amp Logic Level Triacs	12	800	120	125	I, II, III	10, 10, 10	2.9(1)	40
BTA12-800SW	TO-220AB Ins	12-Amp Logic Level Triacs	12	800	120	125	I, II, III	10, 10, 10	2.9(1)	40
BTB12-800C	TO-220AB	12-Amp Standard Triacs	12	800	120	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTA12-800C	TO-220AB Ins	12-Amp Standard Triacs	12	800	120	125	I, II, III, IV	25, 25, 25, 50	5.3(2)	200
BTB12-800CW	TO-220AB	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	35, 35, 35	6.5	500
BTA12-800CW	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	35, 35, 35	6.5	500
T1235-800G	D²PAK	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	35, 35, 35	6.5	500
BTB12-800BW	TO-220AB	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	50, 50, 50	12	1000
BTA12-800BW	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	800	120	125	I, II, III	50, 50, 50	12	1000
BTB12-800B	TO-220AB	12-Amp Standard Triacs	12	800	120	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTA12-800B	TO-220AB Ins	12-Amp Standard Triacs	12	800	120	125	I, II, III, IV	50, 50, 50, 100	5.3(1)	400
16 A Standard, Logic Level and Snubberless™ Triacs										
BTB16-600SW	TO-220AB	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3(1)	40
BTA16-600SW	TO-220AB Ins	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3(1)	40
T1610-600G	D²PAK	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3(1)	40
BTB16-600C	TO-220AB	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	25, 25, 25, 50	7(2)	200
BTA16-600C	TO-220AB Ins	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	25, 25, 25, 50	7(2)	200
BTB16-600CW	TO-220AB	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
BTA16-600CW	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
T1635-600G	D²PAK	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
T1650-600G	D²PAK	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
BTB16-600BW	TO-220AB	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
BTA16-600BW	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
BTB16-600B	TO-220AB	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	50, 50, 50, 100	7(1)	400
BTA16-600B	TO-220AB Ins	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	50, 50, 50, 100	7(1)	400
T1610-800G	D²PAK	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3(1)	40
BTB16-800SW	TO-220AB	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3(1)	40
BTA16-800SW	TO-220AB Ins	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3(1)	40
T1635-800G	D²PAK	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
BTB16-800CW	TO-220AB	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
BTA16-800CW	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
BTB16-800BW	TO-220AB	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	50, 50, 50	14	1000
BTA16-800BW	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	50, 50, 50	14	1000

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTB16-800B	TO-220AB	16-Amp Standard Triacs	16	800	160	125	I, II, III, IV	50, 50, 50, 100	7(1)	400
BTA16-800B	TO-220AB Ins	16-Amp Standard Triacs	16	800	160	125	I, II, III, IV	50, 50, 50, 100	7(1)	400
20 A Snubberless™ Triacs										
BTA20-600CWRG	TO-220AB Ins	20-Amp Snubberless™ Triacs	20	600	200	125	I, II, III	35, 35, 35	20(1)	250
BTA20-700CWRG	TO-220AB Ins	20-Amp Snubberless™ Triacs	20	700	200	125	I, II, III	35, 35, 35	20(1)	250
BTA20-700BWRG	TO-220AB Ins	20-Amp Snubberless™ Triacs	20	700	200	125	I, II, III	50, 50, 50	20	500
25 A Standard and Snubberless™ Triacs										
BTA25-600CWRG	RD-91	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
BTB24-600CWRG	TO-220AB	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
BTA24-600CWRG	TO-220AB Ins	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
BTA26-600CWRG	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
BTA24-600BWRG	TO-220AB Ins	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
BTA25-600BWRG	RD-91	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
BTB24-600BWRG	TO-220AB	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
BTA26-600BWRG	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
BTA25-600BRG	RD-91	25-Amp Standard Triacs	25	600	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTB24-600BRG	TO-220AB	25-Amp Standard Triacs	25	600	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTB26-600BRG	TOP 3	25-Amp Standard Triacs	25	600	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTA26-600BRG	TOP 3 ISOL	25-Amp Standard Triacs	25	600	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
T2535-800G	D2PAK	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
BTA25-800CWRG	RD-91	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
BTB24-800CWRG	TO-220AB	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
BTA24-800CWRG	TO-220AB Ins	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500

STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
BTA26-800CWRG	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
BTA25-800BWRG	RD-91	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000
BTB24-800BWRG	TO-220AB	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000
BTA24-800BWRG	TO-220AB Ins	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000
BTA26-800BWRG	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000
BTA25-800BRG	RD-91	25-Amp Standard Triacs	25	800	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTB24-800BRG	TO-220AB	25-Amp Standard Triacs	25	800	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTB26-800BRG	TOP 3	25-Amp Standard Triacs	25	800	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
BTA26-800BRG	TOP 3 ISOL	25-Amp Standard Triacs	25	800	250	125	I, II, III,IV	50, 50, 50, 100	13(1)	500
T2550-12	TO-220AB, D²PAK, TO-220AB ins	25-Amp Snubberless™ Triacs	25	1200	240	125	I, II, III	50, 50, 50	20	2500
40 A Standard Triacs										
BTA40	RD-91	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20(1)	500
BTB41	TOP 3	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20(1)	500
BTA41	TOP 3 ISOL	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20(1)	500

Notes: (1) parameter at 5 V/µs, (2) parameter at 10 V/µs

1200 V TRIACS, SNUBBERLESS™ HIGH VOLTAGE TRIACS

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Triggering gate current I_{GT} (I, II, III, IV)	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/µs)
TXDVxx12	TO-220AB Ins	12-Amp high voltage Triacs	12	1200	120	125	I, II, III	100,100,100	30	200
T2550-12	TO-220AB, D²PAK, TO-220AB Ins	25-Amp high voltage Triacs	25	1200	240	125	I, II, III	50, 50, 50	20	2500
TPDVxx25	TOP 3 Ins	25-Amp high voltage Triacs	25	1200	230	125	I, II, III	150,150,150	20	500
TPDVxx40	TOP 3 Ins	40-Amp high voltage Triacs	40	1200	350	125	I, II, III	200,200,200	35	500

AUTOMATIC VOLTAGE SWITCHES

Part number	Package	General description	RMS on-state current $I_{T(RMS)}$	Repetitive peak off-state voltage V_{DRM}/V_{RRM}	Non repetitive surge peak on-state current I_{TSM}	Junction temperature (T_j)	Triggering quadrants	Rate of decrease of commutating on-state current (dI/dt)c (@T_j max)	Rising rate of off voltage dV/dt (@T_j max)
			max (A)	max (V)	max (A)	max (°C)		min (A/ms)	min (V/µs)
AVS08CB	TO-220AB	Automatic voltage switch (SMPS < 200 W)	8	500	65	125	I, II, III	100	-
AVS10CB	TO-220AB	Automatic voltage switch (SMPS < 300 W)	8	600	80	125	I, II, III	100	50
AVS12CB	TO-220AB	Automatic voltage switch (SMPS < 500 W)	12	600	100	125	I, II, III	100	50

TRIGGER DIODES

Part number	Package	Description	Breakover voltage (V_{BO})	Breakover voltag
			min (V)	max (V)
DB3	DO-35	DIAC	28	36
DB3TG	DO-35	DIAC	30	34
DB4	DO-35	DIAC	35	45
SMDB3	SOT-23	DIAC	28	36
TMMDB3	MINIMELF	DIAC	28	36
TMMDB3TG	MINIMELF	DIAC	30	34

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