THE DATASHEET OF

T435-800W

life.augmented

SCRs, Triacs,
AC switches and A.S.D™

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

www.st.com

Content

Product tree 2
AC switches 3
ACST overvoltage self-protected switches 3
ACS™ overvoltage self-protected switches 4
Thyristors (SCRs) 5
High-temperature Thyristors (SCRs) 5
Standard and sensitive Thyristors (SCRs) 6
Thyristor application-specific discretes (ASD®) 9
Application-specific ignitors 9
Triacs 9
high-Temperature Triacs T-Series 9
high-temperature Triacs H-Series 11
Standard and Snubberless™ Triacs, 0.8 A - 1 A 12
Standard and Snubberless™ Triacs, 4 A - 40 A 12
1200 V TRIACS, Snubberless™ High Voltage Triacs 21
Automatic voltage switches 21
Diacs 22
Trigger diodes 22

Product tree

Triacs							
	High Temperature	Standard	Logic Level	Snubberless™	AVS	DIACs	
I_{TRMS} max	4 - 30 A	1 - 40 A	0.8 - 16 A	4 - 25 A	8 - 12 A	VBO min	28 - 35 V
V_{DRM}, V_{RRM}	600 - 800 V	600 - 800 V	600 - 800 V	600 - 1200 V	500 - 600 V	VBO max	34 - 45 V
I_{TSM} max	30 - 270 A	8 - 400 A	8 - 160 A	30 - 250 A	65 - 100 A	Tj max	125 °C
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			

ASD®	
ASD® Thyristor	
FLC	
V_{DRM}, V_{RRM}	20 - 200 V
V_{BO} min	140 - 200 V
V_{BO} max	160 - 250 V
Tj max	125 °C

LIC01
HID Starter application

TN22 + P0130
Starlight application

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	ACST
I_{TRMS} max	0.8 - 2 A	2 - 16 A
V_{DRM}, V_{RRM}	600 - 800 V	700 - 800 V
I_{TSM} max	7.3 - 20 A	8 - 140 A
I_{GT} max	5 - 10 mA	10 - 38 mA
T_j max	125 °C	125 - 150 °C

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}) min (V)	Breakover voltage (V_{BO}) max (V)	Junction temperature (T_j) max (°C)
DB3	DO-35	DIAC	28	36	125
DB3TG	DO-35	DIAC	30	34	125
DB4	DO-35	DIAC	35	45	125
SMDB3	SOT-23	DIAC	28	36	125
TMMDB3	MINIMELF	DIAC	28	36	125
TMMDB3TG	MINIMELF	DIAC	30	34	125

ST is a global leader in the semiconductor market serving customers across the spectrum of sense and power and automotive products and embedded processing solutions. From energy management and savings to trust and data security, from healthcare and wellness to smart consumer devices, in the home, car and office, at work and at play, ST is found everywhere microelectronics make a positive and innovative contribution to people's life.

By getting more from technology
to get more from life, ST stands for

life.augmented

life.augmented

© STMicroelectronics - April 2016 - Printed in United Kingdom - All rights reserved
The STMicroelectronics corporate logo is a registered trademark
of the STMicroelectronics group of companies
All other names are the property of their respective owners

Order code: SGTHYRACS0416

For more information on ST products and solutions, visit www.st.com

Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

- View T435-800W on WIN SOURCE
- STMicroelectronics Information

Optimize Your Supply Chain with WIN SOURCE S

- Global Sourcing Solution
- Obsolete Management
- Cost Control Management
- Shortage Management
- Alternative Solution
- Excess Inventory Management