

# SCRs, Triacs, AC switches and A.S.D™

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



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# Product tree

Triacs							
	High Temperature	Standard	Logic Level	Snubberless™	AVS	DIACs	
$I_{TRMS} \text{ max}$	4 - 30 A	1 - 40 A	0.8 - 16 A	4 - 25 A	8 - 12 A	<b>VBO min</b>	28 - 35 V
$V_{DRM}^{\dagger} V_{RRM}$	600 - 800 V	600 - 800 V	600 - 800 V	600 - 1200 V	500 - 600 V	<b>VBO max</b>	34 - 45 V
$I_{TSM} \text{ max}$	30 - 270 A	8 - 400 A	8 - 160 A	30 - 250 A	65 - 100 A	<b>Tj max</b>	125 °C
$I_{GT} \text{ max}$	10 - 50 mA	25 - 50 mA	3 - 50 mA	10 - 50 mA	5 - 10 mA		
$T_j \text{ max}$	150 °C	125 °C	110 - 125 °C	125 °C	125 °C		
	3 or 4 quadrants		3 or 4 quadrants	3 quadrants			

ASD®	
ASD® Thyristor	
<b>FLC</b>	
$V_{DRM}^{\dagger} V_{RRM}$	20 - 200 V
$V_{BO} \text{ min}$	140 - 200 V
$V_{BO} \text{ max}$	160 - 250 V
<b>Tj max</b>	125 °C
<b>LIC01</b>	
HID Starter application	
<b>TN22 + P0130</b>	
Starlight application	

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

AC Switches		
	ACS	ACST
$I_{TRMS} \text{ max}$	0.8 - 2 A	2 - 16 A
$V_{DRM}^{\dagger} V_{RRM}$	600 - 800 V	700 - 800 V
$I_{TSM} \text{ max}$	7.3 - 20 A	8 - 140 A
$I_{GT} \text{ max}$	5 - 10 mA	10 - 38 mA
$T_j \text{ max}$	125 °C	125 - 150 °C

# AC switches

## ACST OVERVOLTAGE SELF-PROTECTED SWITCHES

Part number	Package	General description	RMS on-state current	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering gate current	Clamping voltage	Rate of decrease of commutating on-state current	Rising ratio of off voltage
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	( $T_J$ )	$I_{GT}$ (I, II, III)	$V_{CL}$ (@100 $\mu$ A)	( $dI/dt$ )c min (@ $T_J$ max)	$dV/dt$ (@ $T_J$ max)
			max (A)	max (V)	max (A)	max (°C)	max (mA)	min (V)	min (A/ms)	min (V/ $\mu$ s)
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	D <sup>2</sup> PAK, TO-220AB, TO-220FPAB	Overvoltage protected AC switch	6	800	45	125	10, 10, 10	850	3.5	500
ACST830-8	D <sup>2</sup> PAK, 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	D <sup>2</sup> PAK, TO-220AB	Overvoltage protected AC switch	12	700	120	125	10, 10, 10	850	5.3	200
ACST1235-7	D <sup>2</sup> PAK, 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 $\mu$ A)	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 ( $^{\circ}$ C)	max (mA)	min (V)	min (A/ms)	min (V/ $\mu$ s)
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 $V_{DRM} / V_{BRM}$	Non repetitive surge peak on-state current $I_{TSM}$	Junction temperature (T)	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)
<b>TN1205H-6</b>	D <sup>2</sup> PAK, TO 220AB	High-temperature 12A SCRs	High-temperature SCR	12	600	120	150	5	100
<b>TN1605H-6</b>	TO220AB, TO220FPAB, D <sup>2</sup> PAK	High-temperature 16A SCRs	High-temperature SCR	16	600	140	150	6	200
<b>TN1610H-6</b>	TO220AB, TO220FPAB	High-temperature 16A SCRs	High-temperature SCR	16	600	140	150	10	1000
<b>TN2010H-6</b>	TO220AB, TO220FPAB, D <sup>2</sup> PAK	High-temperature 20A SCRs	High-temperature SCR	20	600	180	150	10	400
<b>TN2015H-6</b>	TO220T, TO220FPAB	High-temperature 20A SCRs	High-temperature SCR	20	600	180	150	15	750
<b>TN4015H-6</b>	D <sup>2</sup> PAK, TO220AB Ins, TO220T	High-temperature 40A SCRs	High-temperature SCR	40	600	360	150	15	500
<b>TM8050H-8W</b>	TO-247	High-temperature 80A SCRs	High-temperature SCR	80	800	670	150	50	1000
<b>TM8050H-8D3</b>	D3PAK-2L	High-temperature 80A SCRs	High-temperature SCR	80	800	670	150	50	1000
<b>TN3050H-12GY<sup>(*)</sup></b>	D2PAK	High-temperature 30A SCRs	Automotive grade SCR	30	1200	300	150	50	1000
<b>TN5050H-12WY</b>	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 $V_{DRM} / V_{BRM}$	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)
<b>Standard thyristors</b>									
<b>TYN606</b>	TO-220AB	6 A Standard SCRs	Standard	6	600	70	125	15	200
<b>TN805-600B</b>	DPAK	8 A Standard SCRs	Standard	8	600	70	125	5	50
<b>TN815-600B</b>	DPAK	8 A Standard SCRs	Standard	8	600	70	125	15	150
<b>TYN608</b>	TO-220AB	8 A Standard SCRs	Standard	8	600	95	125	15	150
<b>TN815-800B</b>	DPAK	8 A Standard SCRs	Standard	8	800	70	125	15	150
<b>TYN610</b>	TO-220AB	10 A Standard SCRs	Standard	10	600	100	125	15	200
<b>TYN810</b>	TO-220AB	10 A Standard SCRs	Standard	10	800	100	125	15	200
<b>TN1205T-600B</b>	DPAK	12 A Standard SCRs	Standard	12	600	115	125	5	100
<b>TYN612M</b>	TO-220AB, TO-220FPAB	12 A Standard SCRs	Standard	12	600	120	125	5	50
<b>TXN612</b>	TO-220AB Ins	12 A Standard SCRs	Standard	12	600	120	125	15	200
<b>TYN612</b>	TO-220AB	12 A Standard SCRs	Standard	12	600	140	125	15, 5	40
<b>TN1215</b>	D <sup>2</sup> PAK, DPAK, IPAK	12 A Standard SCRs	Standard	12	800	140	125	15	200
<b>TYN812</b>	TO-220AB	12 A Standard SCRs	Standard	12	800	140	125	15, 5	40
<b>TYN1012</b>	TO-220AB	12 A Standard SCRs	Standard	12	1000	140	125	15, 5	40
<b>TYN1212</b>	TO-220AB	12 A Standard SCR	Standard	12	1200	120	125	15	200
<b>TN1515-600B</b>	DPAK	15 A Standard SCRs	Standard	15	600	150	125	15	200
<b>TXN616B</b>	TO-220AB Ins	16 A Standard SCRs	Standard	16	600	155	125	15	200
<b>TYN616</b>	TO-220AB	16 A Standard SCRs	Standard	16	600	190	125	25	500
<b>TYN816</b>	TO-220AB	16 A Standard SCRs	Standard	16	600	190	125	25	500
<b>TYN816</b>	TO-220AB	16 A Standard SCRs	Standard	16	800	190	125	25	500
<b>TN1625-1000G</b>	D <sup>2</sup> PAK	16 A Standard SCRs	Standard	16	1000	190	125	25	500
<b>TXN625</b>	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 $V_{DRM} / V_{BRM}$	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	T0-220AB	25 A Standard SCRs	Standard	25	600	300	125	40	1000
TN2540	D <sup>2</sup> PAK	25 A Standard SCRs	Standard	25	800	300	125	40	1000
TYN825	T0-220AB	25 A Standard SCRs	Standard	25	800	300	125	40	1000
TYN1225	T0-220AB	25 A Standard SCR	Standard	25	1200	300	125	40	1000
BTW68-600	TOP 3 ISOL	30 A Standard SCRs	Standard	30	600	400	125	50	500
BTW68-800	TOP 3 ISOL	30 A Standard SCRs	Standard	30	800	400	125	50	500
BTW68	TOP 3 ISOL	30 A Standard SCRs	Standard	30	1200	400	125	50	500
TYN640	T0-220AB	40 A Standard SCRs	Standard	40	600	460	125	35	1000
TYN840	T0-220AB	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
<b>Sensitive thyristors</b>									
XL0840	T0-92	0.8 A Sensitive gate SCRs	Logic level	0.8	400	7	125	0.2	75
P011XX	SOT-223, T0-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	7	125	0.05, 0.025	75
P010XX	SOT-223, SOT-23, T0-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	7	125	0.001, 0.2	100, 200
X006	T0-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	9	125	0.2	25
X00619	SOT-223, T0-92	0.8 A Sensitive gate SCRs	Logic level	0.8	600	9	125	0.2	40
X02	SMBflat-3L, SOT-223, T0-92	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 $V_{DRM}/V_{BRM}$	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
<b>High voltage sensitive thyristors</b>									
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, S08	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 discretés (ASD®)

## APPLICATION-SPECIFIC IGNITORS

Part number	Package	General description	RMS on-state current	Repetitive surge peak onstate current	Peak repeat off voltage	Peak repeat reverse voltage	Breakover voltage	Breakover voltage	Junction temperature	Critical rate of rise of on-state current
			$I_{T(RMS)}$	$I_{TRM}$	$V_{DRM}$	$V_{RRM}$	$V_{BO}$	$V_{BO}$	$T_J$	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	T0-92	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	T0-92	0.8 A SCRs	0.8	7	100	100	-	-	125	50
TN22	IPAK, T0-220AB	Starlight	2	20	400	400	1200	1500	110	50

## HIGH-TEMPERATURE TRIACS T-SERIES

Part number	Package	General description	RMS on-state current	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature (T <sub>j</sub> )	Gate triggering quadrants	Triggering gate current I <sub>GT</sub> (I, II, III, IV)	Rate of decrease of commutating on-state current (di/dt) <sub>c</sub> (@T <sub>j</sub> max)	Rising rate of off voltage dV/dt (@T <sub>j</sub> max)
			I <sub>T(RMS)</sub> max (A)	V <sub>DRM</sub> /V <sub>RRM</sub> max (V)	I <sub>TSM</sub> max (A)	max (°C)		max (mA)	min (A/ms)	min (V/μs)
<b>T435T-600FP</b>	TO-220FPAB	4-Amp Snubberless™ Triacs	4	600	30	125	I, II, III	35, 35, 35	5.3	750
<b>T610T-8FP</b>	TO-220FPAB	6-Amp Triacs - Logic Level gate	6	800	45	150	I, II, III	10, 10, 10	3.7 <sup>(2)</sup>	170
<b>T610T-8T</b>	TO-220AB	6-Amp Triacs - Logic Level gate	6	800	45	150	I, II, III	10, 10, 10	3.7 <sup>(2)</sup>	170
<b>T635T-8FP</b>	TO-220FPAB	6-Amp Snubberless™ Triac	6	800	45	150	I, II, III	35, 35, 35	3	1000 <sup>(1)</sup>
<b>T635T-8T</b>	TO-220AB	6-Amp Snubberless™ Triac	6	800	45	150	I, II, III	35, 35, 35	3	1000 <sup>(1)</sup>
<b>T810T-6I</b>	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	10, 10, 10	2.5 <sup>(2)</sup>	50 <sup>(1)</sup>
<b>T810T-8FP</b>	TO-220FPAB	8-Amp Snubberless™ Triacs	8	800	60	150	I, II, III	10, 10, 10	4.2 <sup>(2)</sup>	170
<b>T810T-8T</b>	TO-220AB	8-Amp Snubberless™ Triacs	8	800	60	150	I, II, III	10, 10, 10	4.2 <sup>(2)</sup>	170
<b>T820T-6I</b>	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	20, 20, 20	2 <sup>(2)</sup>	500 <sup>(1)</sup>
<b>T825T-6I</b>	TO-220AB Ins	8-Amp 4-quadrant Standard Triacs	8	600	60	125	I, II, III, IV	25, 25, 25, 40	2 <sup>(2)</sup>	300 <sup>(1)</sup>
<b>T830-8FP</b>	TO-220FPAB	8-Amp Snubberless™ Triacs	8	800	80	125	I, II, III	30, 30, 30	10	2500
<b>T835T-6I</b>	TO-220AB Ins	8-Amp Snubberless™ Triacs	8	600	60	125	I, II, III	35, 35, 35	6.5 <sup>(2)</sup>	1000 <sup>(1)</sup>
<b>T835T-8FP</b>	TO-220FPAB	8-Amp Snubberless™ Triac	8	800	60	150	I, II, III	35, 35, 35	4	1000 <sup>(1)</sup>
<b>T835T-8T</b>	TO-220AB	8-Amp Snubberless™ Triac	8	800	60	150	I, II, III	35, 35, 35	4	1000 <sup>(1)</sup>
<b>T1210T-6I</b>	TO-220AB Ins	12-Amp 3-quadrant Logic Level Triacs	12	600	90	125	I, II, III	10, 10, 10	3 <sup>(2)</sup>	50 <sup>(1)</sup>
<b>T1220T-6I</b>	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	90	125	I, II, III	20, 20, 20	3 <sup>(1)</sup>	500 <sup>(1)</sup>
<b>T1225T-6I</b>	TO-220AB Ins	12-Amp 4-quadrant Standard Triacs	12	600	90	125	I, II, III, IV	25, 25, 25, 40	3 <sup>(1)</sup>	50 <sup>(1)</sup>
<b>T1235T-6I</b>	TO-220AB Ins	12-Amp Snubberless™ Triacs	12	600	90	125	I, II, III	35, 35, 35	10 <sup>(1)</sup>	1000 <sup>(1)</sup>
<b>T1210T-8FP</b>	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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature (T <sub>j</sub> )	Gate triggering quadrants	Triggering gate current I <sub>GT</sub> (I, II, III, IV)	Rate of decrease of commutating on-state current (di/dt) <sub>c</sub> (@T <sub>j</sub> max)	Rising rate of off voltage dV/dt (@T <sub>j</sub> max)
			I <sub>T(RMS)</sub>	V <sub>DRM</sub> /V <sub>RRM</sub>	I <sub>TSM</sub>	max (°C)		(I, II, III, IV)	(di/dt) <sub>c</sub> (@T <sub>j</sub> max)	dV/dt (@T <sub>j</sub> max)
			max (A)	max (V)	max (A)	max (°C)				
<b>T1210T-8T</b>	TO-220AB	12-Amp 3-quadrant Logic Level Triacs	12	800	90	150	I, II, III	10, 10, 10	2.7	170
<b>T1235T-8FP</b>	TO-220FPAB	12-Amp Snubberless™ Triac	12	800	100	150	I, II, III	35, 35, 35	6	1000 <sup>(1)</sup>
<b>T1235T-8T</b>	TO-220AB	12-Amp Snubberless™ Triac	12	800	100	150	I, II, III	35, 35, 35	6	1000 <sup>(1)</sup>
<b>T1610T-6I</b>	TO-220AB Ins	16-Amp 3-quadrant Logic Level Triacs	16	600	120	125	I, II, III	10, 10, 10	3 <sup>(2)</sup>	20 <sup>(1)</sup>
<b>T1620T-6I</b>	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	120	125	I, II, III	20, 20, 20	3 <sup>(1)</sup>	500 <sup>(1)</sup>
<b>T1635T-6I</b>	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	120	125	I, II, III	35, 35, 35	12 <sup>(1)</sup>	1000 <sup>(1)</sup>
<b>T1610T-8I</b>	TO-220AB Ins	16-Amp 3-quadrant Logic Level Triac	16	800	120	150	I, II, III	10, 10, 10	5.4 <sup>(2)</sup>	50
<b>T1610T-8FP</b>	TO-220FPAB	16-Amp 3-quadrant Logic Level Triacs	16	800	120	150	I, II, III	10, 10, 10	15 <sup>(2)</sup>	170
<b>T1610T-8T</b>	TO-220AB	16-Amp 3-quadrant Logic Level Triacs	16	800	120	150	I, II, III	10, 10, 10	15 <sup>(2)</sup>	170
<b>T1620T-8I</b>	TO-220AB Ins	Snubberless™ 16-Amp Triac	16	800	120	150	I, II, III	20, 20, 20	4.5	500
<b>T1625T-8I</b>	TO-220AB Ins	16-Amp 4-quadrant Standard Triac	16	800	120	150	I, II, III, IV	25, 25, 25, 50	6 <sup>(2)</sup>	300
<b>T1635T-8I</b>	TO-220AB Ins	Snubberless™ 16-Amp Triac	16	800	120	150	I, II, III	35, 35, 35	12 <sup>(2)</sup>	1000
<b>T1635T-8FP</b>	TO-220FPAB	16-Amp Snubberless™ Triac	16	800	120	150	I, II, III	35, 35, 35	8	1000
<b>T1635T-8T</b>	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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature (T <sub>j</sub> )	Triggering quadrants	Triggering gate current I <sub>GT</sub> (I, II, III)	Rate of decrease of commutating on-state current (di/dt) <sub>c</sub> (@T <sub>j</sub> max)	Rising rate of off voltage dV/dt (@T <sub>j</sub> max)
			I <sub>T(RMS)</sub>							
T410H	TO 220AB	4-Amp sensitive Triacs - Logic Level	4	600	40	150	I, II, III	10, 10, 10	1.5 <sup>(1)</sup>	75
T610H	TO 220AB	6-Amp sensitive Triacs - Logic Level	6	600	60	150	I, II, III	10, 10, 10	2.3 <sup>(1)</sup>	75
T810H	D <sup>2</sup> PAK, TO-220AB	8-Amp sensitive Triacs - Logic Level	8	600	80	150	I, II, III	10, 10, 10	3 <sup>(1)</sup>	75
T835H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	8-Amp Triacs - Snubberless™	8	600	80	150	I, II, III	35, 35, 35	11	1000
T850H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	8-Amp Triacs - Snubberless™	8	600	80	150	I, II, III	50, 50, 50	14	1500
T1010H	D <sup>2</sup> PAK, TO-220AB	10-Amp sensitive gate Triacs - Logic Level	10	600	100	150	I, II, III	10, 10, 10	3.8 <sup>(1)</sup>	75
T1035H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	10-Amp Triacs - Snubberless™	10	600	100	150	I, II, III	35, 35, 35	13	1000
T1050H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	10-Amp Triacs - Snubberless™	10	600	100	150	I, II, III	50, 50, 50	18	1500
T1235H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	12-Amp Triacs - Snubberless™	12	600	120	150	I, II, III	10, 10, 10	16	1000
T1250H	D <sup>2</sup> PAK, 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 <sup>(1)</sup>	100
T1635H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	16-Amp Triacs - Snubberless™	16	600	160	150	I, II, III	35, 35, 35	21	1000
T1650H	D <sup>2</sup> PAK, TO-220AB, TO-220AB Ins	16-Amp Triacs - Snubberless™	16	600	160	150	I, II, III	50, 50, 50	28	1500
T2035H	D <sup>2</sup> PAK, 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) <sub>c</sub> 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	T0-92	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, T0-92	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, T0-92	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, T0-92	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, T0-92	1-Amp Standard Triacs	1	600	8	125	I, II, III, IV	25, 25, 25, 25	0.44	100
Z0103N	SOT-223, T0-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	3, 3, 3, 5	0.44	10
Z0107N	SOT-223, T0-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	5, 5, 5, 7	0.44	20
Z0109N	SOT-223, T0-92	1-Amp Logic Level Triacs	1	800	8	125	I, II, III, IV	10, 10, 10, 10	0.44	50
Z0110N	SOT-223, T0-92	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) <sub>c</sub> (@ $T_J$ 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)
<b>4 A Standard, Logic Level and Snubberless™ Triacs</b>										
Z0402MF	T0-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	3, 3, 3, 3	0.5	10
Z0405MF	T0-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	5, 5, 5, 5	1	20
Z0409MF	T0-202-3	4-Amp Logic Level Triacs	4	600	20	125	I, II, III, IV	10, 10, 10, 10	2	100
Z0410MF	T0-202-3	4-Amp Standard Triacs	4	600	20	125	I, II, III, IV	25, 25, 25, 25	5	200
T405-600	DPAK, IPAK, T0-220AB	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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage		
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	(T)		$I_{GT}$ (I, II, III, IV)	(dI/dt) <sub>c</sub> (@T <sub>j</sub> max)	(@T <sub>j</sub> 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		
<b>6 A Standard, Logic Level and Snubberless™ Triacs</b>												
BTB06-600TW	TO-220AB	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	5, 5, 5	1.2 <sup>(2)</sup>	20		
BTA06-600TW	TO-220AB Ins	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	5, 5, 5	1.2 <sup>(2)</sup>	20		
BTB06-600SW	TO-220AB	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	10, 10, 10	2.4 <sup>(2)</sup>	40		
BTA06-600SW	TO-220AB Ins	6-Amp Logic Level Triacs	6	600	60	125	I, II, III	10, 10, 10	2.4 <sup>(2)</sup>	40		
BTB06-600C	TO-220AB	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	25, 25, 25, 50	2.7 <sup>(2)</sup>	200		
BTA06-600C	TO-220AB Ins	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	25, 25, 25, 50	2.7 <sup>(2)</sup>	200		
BTB06-600CW	TO-220AB	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	35, 35, 35	3.5	400		
BTA06T-600CW RG	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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature (T <sub>j</sub> )	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage
			I <sub>TRMS</sub>	V <sub>DRM</sub> /V <sub>RRM</sub>	I <sub>TSM</sub>	(°C)		I <sub>GT</sub> (I, II, III, IV)	(di/dt) <sub>c</sub> (@T <sub>j</sub> max)	(@T <sub>j</sub> max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/μs)
<b>BTA06-600BW</b>	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	600	60	125	I, II, III	50, 50, 50	5.3	1000
<b>BTB06-600B</b>	TO-220AB	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	50, 50, 50, 100	2.7 <sup>(2)</sup>	400
<b>BTA06-600B</b>	TO-220AB Ins	6-Amp Standard Triacs	6	600	60	125	I, II, III, IV	50, 50, 50, 100	2.7 <sup>(2)</sup>	400
<b>BTB06-800TW</b>	TO-220AB	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	5, 5, 5	1.2 <sup>(2)</sup>	20
<b>BTA06-800TW</b>	TO-220AB Ins	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	5, 5, 5	1.2 <sup>(2)</sup>	20
<b>BTB06-800SW</b>	TO-220AB	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	10, 10, 10	2.4 <sup>(2)</sup>	40
<b>BTA06-800SW</b>	TO-220AB Ins	6-Amp Logic Level Triacs	6	800	60	125	I, II, III	10, 10, 10	2.4 <sup>(2)</sup>	40
<b>BTB06-800C</b>	TO-220AB	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	25, 25, 25, 50	2.7 <sup>(1)</sup>	200
<b>BTA06-800C</b>	TO-220AB Ins	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	25, 25, 25, 50	2.7 <sup>(1)</sup>	200
<b>BTB06-800CW</b>	TO-220AB	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	35, 35, 35	3.5	400
<b>BTA06-800CW</b>	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	35, 35, 35	3.5	400
<b>BTB06-800BW</b>	TO-220AB	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	50, 50, 50	5.3	1000
<b>BTA06-800BW</b>	TO-220AB Ins	6-Amp Snubberless™ Triacs	6	800	60	125	I, II, III	50, 50, 50	5.3	1000
<b>BTB06-800B</b>	TO-220AB	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	50, 50, 50, 100	2.7 <sup>(2)</sup>	400
<b>BTA06-800B</b>	TO-220AB Ins	6-Amp Standard Triacs	6	800	60	125	I, II, III, IV	50, 50, 50, 100	2.7 <sup>(2)</sup>	400
<b>8 A Standard, Logic Level and Snubberless™ Triacs</b>										
<b>BTB08-600TW</b>	TO-220AB	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	5, 5, 5	1.5 <sup>(1)</sup>	20
<b>BTA08-600TW</b>	TO-220AB Ins	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	5, 5, 5	1.5 <sup>(1)</sup>	20
<b>BTB08-600SW</b>	TO-220AB	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>BTA08-600SW</b>	TO-220AB Ins	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>T810-600</b>	D2PAK, IPAK	8-Amp Logic Level Triacs	8	600	80	125	I, II, III	10, 10, 10	2.8	40
<b>BTB08-600C</b>	TO-220AB	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	25, 25, 25, 50	5.3 <sup>(2)</sup>	200
<b>BTA08-600C</b>	TO-220AB Ins	8-Amp Standard Triacs	8	600	80	125	I, II, III, IV	25, 25, 25, 50	5.3 <sup>(2)</sup>	200



## STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

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

## STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	(T)		$I_{GT}$ (I, II, III, IV)	(di/dt) <sub>c</sub> (@T <sub>j</sub> max)	dV/dt (@T <sub>j</sub> max)
10 A Standard, Logic Level and Snubberless™ Triacs										
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/μs)
<b>BTB10-600C</b>	T0-220AB	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	25, 25, 25, 50	4.4 <sup>(2)</sup>	200
<b>BTA10-600C</b>	T0-220AB Ins	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	25, 25, 25, 50	4.4 <sup>(2)</sup>	200
<b>BTB10-600CW</b>	T0-220AB	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	35, 35, 35	5.5	1000
<b>BTA10-600CW</b>	T0-220AB Ins	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	35, 35, 35	5.5	1000
<b>BTA10-600BW</b>	T0-220AB Ins	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	50, 50, 50	9	1000
<b>BTB10-600BW</b>	T0-220AB	10-Amp Snubberless™ Triacs	10	600	100	125	I, II, III	50, 50, 50	9	1000
<b>BTB10-600B</b>	T0-220AB	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	50, 50, 50, 100	4.4 <sup>(2)</sup>	400
<b>BTA10-600B</b>	T0-220AB Ins	10-Amp Standard Triacs	10	600	100	125	I, II, III, IV	50, 50, 50, 100	4.4 <sup>(2)</sup>	400
<b>BTA10-600GP</b>	T0-220AB Ins	10-Amp Standard Triacs	10	600	120	125	I, II, III, IV	25, 25, 25, 100	2.2	30
<b>BTB10-800C</b>	T0-220AB	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	25, 25, 25, 50	4.4 <sup>(2)</sup>	200
<b>BTA10-800C</b>	T0-220AB Ins	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	25, 25, 25, 50	4.4 <sup>(2)</sup>	200
<b>BTB10-800CW</b>	T0-220AB	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	35, 35, 35	5.5	1000
<b>BTA10-800CW</b>	T0-220AB Ins	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	35, 35, 35	5.5	1000
<b>BTB10-800BW</b>	T0-220AB	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	50, 50, 50	9	1000
<b>BTA10-800BW</b>	T0-220AB Ins	10-Amp Snubberless™ Triacs	10	800	100	125	I, II, III	50, 50, 50	9	1000
<b>BTB10-800B</b>	T0-220AB	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	50, 50, 50, 100	4.4 <sup>(2)</sup>	400
<b>BTA10-800B</b>	T0-220AB Ins	10-Amp Standard Triacs	10	800	100	125	I, II, III, IV	50, 50, 50, 100	4.4 <sup>(2)</sup>	400
12 A Standard, Logic Level and Snubberless™ Triacs										
<b>BTB12-600TW</b>	T0-220AB	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	5, 5, 5	1 <sup>(1)</sup>	20
<b>BTA12-600TW</b>	T0-220AB Ins	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	5, 5, 5	1 <sup>(1)</sup>	20
<b>BTA12-600SW</b>	T0-220AB Ins	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	10, 10, 10	2.9 <sup>(1)</sup>	40
<b>BTB12-600SW</b>	T0-220AB	12-Amp Logic Level Triacs	12	600	120	125	I, II, III	10, 10, 10	2.9 <sup>(1)</sup>	40

## STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

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

## STANDARD AND SNUBBERLESS™ TRIACS, 4 A - 40 A

Part number	Package	General description	RMS on-state current	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	(T)		$I_{GT}$ (I, II, III, IV)	(dI/dt) <sub>c</sub> (@T <sub>J</sub> max)	(@T <sub>J</sub> max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/μs)
<b>BTA12-800B</b>	TO-220AB Ins	12-Amp Standard Triacs	12	800	120	125	I, II, III, IV	50, 50, 50, 100	5.3 <sup>(1)</sup>	400
<b>16 A Standard, Logic Level and Snubberless™ Triacs</b>										
<b>BTB16-600SW</b>	TO-220AB	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>BTA16-600SW</b>	TO-220AB Ins	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>T1610-600G</b>	D <sup>2</sup> PAK	16-Amp Logic Level Triacs	16	600	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>BTB16-600C</b>	TO-220AB	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	25, 25, 25, 50	7 <sup>(2)</sup>	200
<b>BTA16-600C</b>	TO-220AB Ins	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	25, 25, 25, 50	7 <sup>(2)</sup>	200
<b>BTB16-600CW</b>	TO-220AB	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
<b>BTA16-600CW</b>	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
<b>T1635-600G</b>	D <sup>2</sup> PAK	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	35, 35, 35	8.5	500
<b>T1650-600G</b>	D <sup>2</sup> PAK	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
<b>BTB16-600BW</b>	TO-220AB	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
<b>BTA16-600BW</b>	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	600	160	125	I, II, III	50, 50, 50	14	1000
<b>BTB16-600B</b>	TO-220AB	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	50, 50, 50, 100	7 <sup>(1)</sup>	400
<b>BTA16-600B</b>	TO-220AB Ins	16-Amp Standard Triacs	16	600	160	125	I, II, III, IV	50, 50, 50, 100	7 <sup>(1)</sup>	400
<b>T1610-800G</b>	D <sup>2</sup> PAK	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>BTB16-800SW</b>	TO-220AB	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>BTA16-800SW</b>	TO-220AB Ins	16-Amp Logic Level Triacs	16	800	160	125	I, II, III	10, 10, 10	3 <sup>(1)</sup>	40
<b>T1635-800G</b>	D <sup>2</sup> PAK	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
<b>BTB16-800CW</b>	TO-220AB	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
<b>BTA16-800CW</b>	TO-220AB Ins	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	35, 35, 35	8.5	500
<b>BTB16-800BW</b>	TO-220AB	16-Amp Snubberless™ Triacs	16	800	160	125	I, II, III	50, 50, 50	14	1000
<b>BTA16-800BW</b>	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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	(T)		$I_{GT}$ (I, II, III, IV)	(di/dt) <sub>c</sub> (@T <sub>j</sub> max)	(@T <sub>j</sub> max)
			max (A)	max (V)	max (A)	max (°C)		max (mA)	min (A/ms)	min (V/μs)
<b>BTB16-800B</b>	T0-220AB	16-Amp Standard Triacs	16	800	160	125	I, II, III, IV	50, 50, 50, 100	7 <sup>(1)</sup>	400
<b>BTA16-800B</b>	T0-220AB Ins	16-Amp Standard Triacs	16	800	160	125	I, II, III, IV	50, 50, 50, 100	7 <sup>(1)</sup>	400
<b>20 A Snubberless™ Triacs</b>										
<b>BTA20-600CWRG</b>	T0-220AB Ins	20-Amp Snubberless™ Triacs	20	600	200	125	I, II, III	35, 35, 35	20 <sup>(1)</sup>	250
<b>BTA20-700CWRG</b>	T0-220AB Ins	20-Amp Snubberless™ Triacs	20	700	200	125	I, II, III	35, 35, 35	20 <sup>(1)</sup>	250
<b>BTA20-700BWRG</b>	T0-220AB Ins	20-Amp Snubberless™ Triacs	20	700	200	125	I, II, III	50, 50, 50	20	500
<b>25 A Standard and Snubberless™ Triacs</b>										
<b>BTA25-600CWRG</b>	RD-91	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
<b>BTB24-600CWRG</b>	T0-220AB	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
<b>BTA24-600CWRG</b>	T0-220AB Ins	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
<b>BTA26-600CWRG</b>	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	35, 35, 35	13	500
<b>BTA24-600BWRG</b>	T0-220AB Ins	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
<b>BTA25-600BWRG</b>	RD-91	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
<b>BTB24-600BWRG</b>	T0-220AB	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
<b>BTA26-600BWRG</b>	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	600	250	125	I, II, III	50, 50, 50	22	1000
<b>BTA25-600BRG</b>	RD-91	25-Amp Standard Triacs	25	600	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500
<b>BTB24-600BRG</b>	T0-220AB	25-Amp Standard Triacs	25	600	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500
<b>BTB26-600BRG</b>	TOP 3	25-Amp Standard Triacs	25	600	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500
<b>BTA26-600BRG</b>	TOP 3 ISOL	25-Amp Standard Triacs	25	600	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500
<b>T2535-800G</b>	D2PAK	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
<b>BTA25-800CWRG</b>	RD-91	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
<b>BTB24-800CWRG</b>	T0-220AB	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500
<b>BTA24-800CWRG</b>	T0-220AB 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	Repetitive peak off-state voltage	Non repetitive surge peak on-state current	Junction temperature	Triggering quadrants	Triggering gate current	Rate of decrease of commutating on-state current	Rising rate of off voltage		
			$I_{T(RMS)}$	$V_{DRM}/V_{RRM}$	$I_{TSM}$	(T)		$I_{GT}$ (I, II, III, IV)	(dI/dt) <sub>c</sub> (@T <sub>j</sub> max)	dV/dt (@T <sub>j</sub> max)		
			max (A)	max (V)	max (A)	max (°C)				max (mA)	min (A/ms)	min (V/μs)
<b>BTA26-800CWRG</b>	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	35, 35, 35	13	500		
<b>BTA25-800BWRG</b>	RD-91	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000		
<b>BTB24-800BWRG</b>	T0-220AB	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000		
<b>BTA24-800BWRG</b>	T0-220AB Ins	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000		
<b>BTA26-800BWRG</b>	TOP 3 ISOL	25-Amp Snubberless™ Triacs	25	800	250	125	I, II, III	50, 50, 50	22	1000		
<b>BTA25-800BRG</b>	RD-91	25-Amp Standard Triacs	25	800	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500		
<b>BTB24-800BRG</b>	T0-220AB	25-Amp Standard Triacs	25	800	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500		
<b>BTB26-800BRG</b>	TOP 3	25-Amp Standard Triacs	25	800	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500		
<b>BTA26-800BRG</b>	TOP 3 ISOL	25-Amp Standard Triacs	25	800	250	125	I, II, III, IV	50, 50, 50, 100	13 <sup>(1)</sup>	500		
<b>T2550-12</b>	T0-220AB, D <sup>2</sup> PAK, T0-220AB ins	25-Amp Snubberless™ Triacs	25	1200	240	125	I, II, III	50, 50, 50	20	2500		
<b>40 A Standard Triacs</b>												
<b>BTA40</b>	RD-91	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20 <sup>(1)</sup>	500		
<b>BTB41</b>	TOP 3	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20 <sup>(1)</sup>	500		
<b>BTA41</b>	TOP 3 ISOL	40-Amp Standard Triacs	40	800	400	125	I, II, III, IV	50, 50, 50, 100	20 <sup>(1)</sup>	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 ( $di/dt$ ) <sub>c</sub> (@ $T_J$ 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)
<b>TXDVxx12</b>	TO-220AB Ins	12-Amp high voltage Triacs	12	1200	120	125	I, II, III	100,100,100	30	200
<b>T2550-12</b>	TO-220AB, D <sup>2</sup> PAK, TO-220AB Ins	25-Amp high voltage Triacs	25	1200	240	125	I, II, III	50, 50, 50	20	2500
<b>TPDVxx25</b>	TOP 3 Ins	25-Amp high voltage Triacs	25	1200	230	125	I, II, III	150,150,150	20	500
<b>TPDVxx40</b>	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 ( $di/dt$ ) <sub>c</sub> (@ $T_J$ 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)
<b>AVS08CB</b>	TO-220AB	Automatic voltage switch (SMPS < 200 W)	8	500	65	125	I, II, III	100	-
<b>AVS10CB</b>	TO-220AB	Automatic voltage switch (SMPS < 300 W)	8	600	80	125	I, II, III	100	50
<b>AVS12CB</b>	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 ( $V_{BO}$ )		Junction temperature ( $T_J$ ) max (°C)
			min (V)	max (V)	
<b>DB3</b>	D0-35	DIAC	28	36	125
<b>DB3TG</b>	D0-35	DIAC	30	34	125
<b>DB4</b>	D0-35	DIAC	35	45	125
<b>SMDB3</b>	SOT-23	DIAC	28	36	125
<b>TMMDB3</b>	MINIMELF	DIAC	28	36	125
<b>TMMDB3TG</b>	MINIMELF	DIAC	30	34	125





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