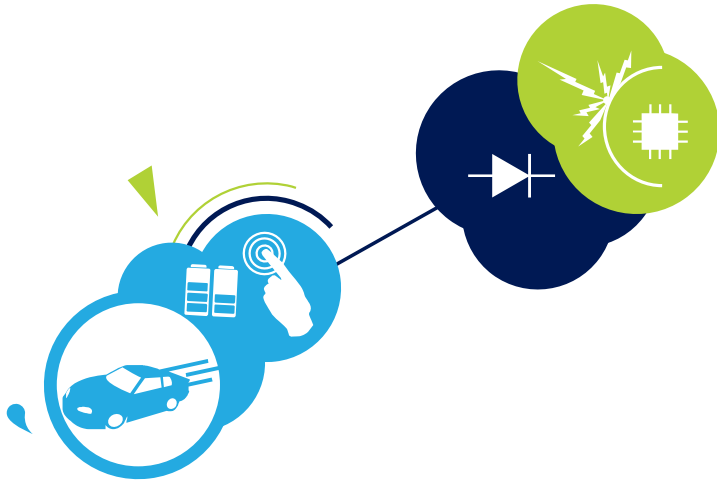


Automotive-grade Protection devices & rectifiers



AEC-Q compliant



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AUTOMOTIVE DATALINE ESD PROTECTION

Unidirectional clamping arrays

Part number	Number of protected lines	ISO 7637-2 pulse compliance	ISO 10605 contact/air (kV)	Stand-off voltage (V _{RM}) (V)	Leakage current (I _{RM}) @ V _{RM} (µA)		Breakdown voltage V _{BR} @ I _R (V)		Capacitance (C _{lim}) @ 0 V bias (pF)	Junction temperature (T _J) max (°C)	Package
					max	typ	max	typ			
ESDALC5-1BT2Y(*)	1	3a, 3b	> 8/15	3	1	5	1	25	150	SOD-882 (0402)	
ESDA5V3LY	2	3a, 3b	> 8/15	3	2	5.3	1	220	150	SOT23	
ESDA5V3SC6Y	4	3a, 3b	> 8/15	3	2	5.3	1	280	150	SOT23-6L	
ESDA6V1LY	2	3a, 3b	> 8/15	5.2	20	6.1	1	140	150	SOT23	
ESDA6V1SC6Y	4	3a, 3b	> 8/15	5.2	20	6.1	1	190	150	SOT23-6L	
ESDA14V2LY	2	1, 2, 3a, 3b	> 8/15	12	5	14.2	1	90	150	SOT23	
ESDA25LY	2	1, 2, 3a, 3b	> 8/15	24	1	25	1	50	150	SOT23	
ESDA14V2SC5Y	4	1, 2, 3a, 3b	> 8/15	12	5	14.2	1	100	150	SOT23-5L	
ESDA25SC6Y	4	1, 2, 3a, 3b	> 8/15	24	1	25	1	60	150	SOT23-6L	

(*) New products, available in 04-2013

Rail-to-rail protection

Part number	Number of protected lines	ISO 7637-2 pulse compliance	ISO 10605 contact/air (kV)	Stand-off voltage (V _{RM}) (V)	Leakage current (I _L) @ 15 V max (µA)	Forward voltage (V _F) @ 50 mA max (V)	Capacitance (C _{lim}) @ 5 V max (pF)	Package

High-speed interface protection

Part number	Number of protected lines	ISO 7637-2 pulse compliance	ISO 10605 contact/air (kV)	Stand-off voltage (V_{noV})		Leakage current (I_{lim}) @ V_{FM}		Breakdown voltage (V_{BR}) @ I_h		Capacitance (C_{int}) I/O to Gnd		Capacitance (C_{int}) I/O to I/O		Junction temperature (T) max (°C)	Package
				(V)	(V)	max (µA)	(mA)	min (V)	(mA)	typ (pF)	typ (pF)	typ (pF)	max (°C)		
USBLC6-2SC6Y	2	3a, 3b	> 8/15	5,25	6	0,15	1	6	1	2,5	1,2	150	SOT23-6L		
HSP061-2PEY(*)	2	3a, 3b	> 8/15	5	6	0,5	1	6	1	0,6	0,3	125	SOT666		
USBLC6-4SC6Y	4	3a, 3b	> 8/15	5,25	6	0,15	1	6	1	3	1,85	150	SOT23-6L		
DVIULC6-4SC6Y	4	3a, 3b	> 8/15	5	6	0,5	1	6	1	0,85	0,42	150	SOT23-6L		
HDMIULC6-4SC6Y	4	3a, 3b	> 8/15	5	6	0,5	1	6	1	0,85	0,42	150	SOT23-6L		
HSP061-4M10Y(*)	4	3a, 3b	> 8/15	5	6	0,5	1	6	1	0,6	0,3	150	µ0FN-10L		

(*) New products, available in 04-2013

Communication bus protection

Part number	Number of protected lines	ISO 7637-2 pulse compliance	ISO 10605 contact/air (kV)	Peak pulse power 8/20 µs (W)	Stand-off voltage (V_{noV}) (V)	Leakage current (I_{lim}) @ V_{FM} (µA)	Breakdown voltage (V_{BR}) @ I_h		Clamping voltage (V_{cl}) @ I_{sp} 8/20 µs (V)	Capacitance (C_{int}) @ 0 V max (pF)	Junction temperature (T) max (°C)	Package	
							V_{BR+} min (V)	V_{BR-} min (V) (mA)					
LIN bus protection													
ESDLIN1524BJ	1	3a, 3b	> 8/15	160/200	15/- 24	0,5	17,1	25,4	5	35	20	125	SOD-323
CAN bus protection													
ESDCAN24-2BLY	1	3a, 3b	> 8/15	230	24	0,1	27	-27	1	43	30	150	SOT23-3L

AUTOMOTIVE POWER-RAIL TVS PROTECTION

Automotive-grade 400 W Transil™ (TVS), ISO 7637-2 compliant (pulses 1, 2, 3a, 3b)

Part number		Peak pulse power (P _{PP}) 10/1000 µs @ 25 °C	Peak pulse power (P _{PP}) 10/1000 µs @ 150 °C	Peak pulse power (P _{PP}) 8/20 µs	Stand-off voltage (V _{RMV})	Leakage current (I _{RMV}) @ V _{RM}		Breakdown voltage (V _{BR}) @ I _R		Clamping voltage (V _C) @ I _{CM} 10/1000 µs		Junction temperature (T _J) max (°C)	Package
Unidirectional	Bidirectional					@ 25 °C max (µA)	@ 85 °C max (µA)	min (V)	typ (V)	(mA)	max (V)		
SM4TY series													
SM4T67AY	SM4T67CAY	400	270	2300	5	20	50	6.4	6.74	10	9.2	43.5	SMA
SM4T76AY	SM4T76CAY	400	270	2300	7	20	50	7.2	7.58	10	11.2	35.7	SMA
SM4T10AY	SM4T10CAY	400	270	2300	9	0.2	1	9.4	9.9	1	14.4	27.7	SMA
SM4T12AY	SM4T12CAY	400	270	2300	10	0.2	1	11.1	11.7	1	17	23.5	SMA
SM4T14AY	SM4T14CAY	400	270	2300	12	0.2	1	13.3	14	1	19.9	20.1	SMA
SM4T15AY	SM4T15CAY	400	270	2300	13	0.2	1	14.4	15.2	1	21.5	18.6	SMA
SM4T18AY	SM4T18CAY	400	270	2300	15	0.2	1	16.7	17.6	1	24.4	16.4	SMA
SM4T21AY	SM4T21CAY	400	270	2300	18	0.2	1	20	21.1	1	29.2	13.7	SMA
SM4T23AY	SM4T23CAY	400	270	2300	20	0.2	1	22.2	23.4	1	32.4	12.3	SMA
SM4T26AY	SM4T26CAY	400	270	2300	22	0.2	1	24.4	25.7	1	35.5	11.2	SMA
SM4T28AY	SM4T28CAY	400	270	2300	24	0.2	1	26.7	28.1	1	38.9	10.3	SMA
SM4T30AY	SM4T30CAY	400	270	2300	26	0.2	1	28.9	30.4	1	42.1	9.5	SMA
SM4T33AY	SM4T33CAY	400	270	2300	28	0.2	1	31.1	32.7	1	45.4	8.8	SMA
SM4T35AY	SM4T35CAY	400	270	2300	30	0.2	1	33.3	35.1	1	48.4	8.3	SMA
SM4T39AY	SM4T39CAY	400	270	2300	33	0.2	1	36.7	38.6	1	53.3	7.5	SMA
SM4T47AY	SM4T47CAY	400	270	2300	40	0.2	1	44.4	46.7	1	64.5	6.2	SMA
SM4T50AY	SM4T50CAY	400	270	2300	43	0.2	1	47.8	50.3	1	69.4	5.7	SMA
SM4T56AY	SM4T56CAY	400	270	2300	48	0.2	1	53.3	56.1	1	77.4	5.2	SMA
SM4T68AY	SM4T68CAY	400	270	2300	58	0.2	1	64.4	67.8	1	93.6	4.3	SMA
SM4T82AY	SM4T82CAY	400	270	2300	70	0.2	1	77.8	81.9	1	113	3.5	SMA

Automotive-grade 600 W Transil™ (TVS), ISO 7637-2 compliant (pulses 1, 2, 3a, 3b)

Part number		Peak pulse power (P _{pp}) 10/1000 μs @ 25 °C (W)	Peak pulse power (P _{pp}) 10/1000 μs @ 150 °C (W)	Peak pulse power (P _{pp}) 8/20 μs (kW)	Stand-off voltage (V _{rm}) (V)	Leakage current (I _{rm}) @ V _{rm} (μA)		Breakdown voltage (V _{BR}) @ I _r (V)		Clamping voltage (V _{cl}) @ I _{cp} 10/1000 μs (V)		Junction temperature (T _j) (°C)	Package
Unidirectional	Bidirectional	(W)	(W)	(kW)	(V)	@ 25 °C max (μA)	@ 85 °C max (μA)	min (V)	typ (V)	max (V)	(A)	max (°C)	
SMA6TY series													
SMA6T6V7AY	SMA6T6V7CAY	600	300	4000	5	20	50	6.4	6.7	10	9.1	68	SMA
SMA6T7V6AY	SMA6T7V6CAY	600	300	4000	7	20	50	7.2	7.6	10	10.2	56	SMA
SMA6T10AY	SMA6T10CAY	600	300	4000	9	20	50	9.4	9.9	1	13.3	41.7	SMA
SMA6T12AY	SMA6T12CAY	600	300	4000	10	0.2	1	11.1	11.7	1	15.7	37	SMA
SMA6T14AY	SMA6T14CAY	600	300	4000	12	0.2	1	13.3	14	1	18.8	31	SMA
SMA6T15AY	SMA6T15CAY	600	300	4000	15	0.2	1	16.7	17.6	1	23.6	25.1	SMA
SMA6T18AY	SMA6T18CAY	600	300	4000	18	0.2	1	20	21.1	1	28.3	21.5	SMA
SMA6T22AY	SMA6T22CAY	600	300	4000	19	0.2	1	20.9	22	1	30.6	20	SMA
SMA6T24AY	SMA6T24CAY	600	300	4000	21	0.2	1	22.8	24	1	33.2	18	SMA
SMA6T28AY	SMA6T28CAY	600	300	4000	24	0.2	1	26.7	28.1	1	37.8	16	SMA
SMA6T30AY	SMA6T30CAY	600	300	4000	26	0.2	1	28.5	30	1	41.5	14.5	SMA
SMA6T33AY	SMA6T33CAY	600	300	4000	28	0.2	1	31.4	33	1	45.7	13.1	SMA
SMA6T39AY	SMA6T39CAY	600	300	4000	33	0.2	1	37.1	39	1	53.9	11.1	SMA
SMA6T47AY	SMA6T47CAY	600	300	4000	40	0.2	1	44.4	46.7	1	62.8	9.7	SMA
SMA6T56AY	SMA6T56CAY	600	300	4000	48	0.2	1	53.3	56.1	1	75.4	8.1	SMA
SMA6T68AY	SMA6T68CAY	600	300	4000	58	0.2	1	64.4	67.8	1	91.1	6.7	SMA
SMA6T82AY	SMA6T82CAY	600	300	4000	70	0.2	1	77.8	81.9	1	110	5.5	SMA
SM6TY series													
SM6T6V8AY	SM6T6V8CAY	600	515	4000	6	20	50	6.45	6.8	10	10.5	57	SMB
SM6T7V5AY	SM6T7V5CAY	600	515	4000	6	20	50	7.13	7.5	10	11.3	53	SMB
SM6T10AY	SM6T10CAY	600	515	4000	9	20	50	9.5	10	1	14.5	41	SMB

Automotive-grade 600 W Transil™ (TVS), ISO 7637-2 compliant (pulses 1, 2, 3a, 3b)

Part number		Peak pulse power (P _{pp}) 10/1000 μs @ 25 °C	Peak pulse power (P _{pp}) 10/1000 μs @ 150 °C	Peak pulse power (P _{pp}) 8/20 μs	Stand-off voltage (V _{RM})	Leakage current (I _{RM}) @ V _{RM}		Breakdown voltage (V _{BR}) @ I _R		Clamping voltage (V _{CL}) @ I _{CP} 10/1000 μs		Junction temperature (T _J)	Package
Unidirectional	Bidirectional	(W)	(W)	(kW)	(V)	@ 25 °C max (μA)	@ 85 °C max (μA)	min (V)	typ (V)	max (V)	(A)	max (°C)	
SM6T12AY	SM6T12CAY	600	515	4000	10	0.2	1	11.4	12	1	16.7	36	SMB
SM6T15AY	SM6T15CAY	600	515	4000	13	0.2	1	14.3	15	1	21.2	28	SMB
SM6T18AY	SM6T18CAY	600	515	4000	15	0.2	1	17.1	18	1	25.2	24	SMB
SM6T22AY	SM6T22CAY	600	515	4000	19	0.2	1	20.9	22	1	30.6	20	SMB
SM6T24AY	SM6T24CAY	600	515	4000	21	0.2	1	22.8	24	1	33.2	18	SMB
SM6T27AY	SM6T27CAY	600	515	4000	23	0.2	1	25.7	27	1	37.5	16	SMB
SM6T30AY	SM6T30CAY	600	515	4000	26	0.2	1	28.5	30	1	41.5	14.5	SMB
SM6T33AY	SM6T33CAY	600	515	4000	28	0.2	1	31.4	33	1	45.7	13.1	SMB
SM6T36AY	SM6T36CAY	600	515	4000	31	0.2	1	34.2	36	1	49.9	12	SMB
SM6T39AY	SM6T39CAY	600	515	4000	33	0.2	1	37.1	39	1	53.9	11.1	SMB
SM6T42AY	SM6T42CAY	600	515	4000	36	0.2	1	40	42.1	1	58.1	10.3	SMB
SM6T47AY	SM6T47CAY	600	515	4000	40	0.2	1	44.4	46.7	1	64.5	9.7	SMB
SM6T56AY	SM6T56CAY	600	515	4000	48	0.2	1	53.2	56	1	76.6	7.8	SMB
SM6T68AY	SM6T68CAY	600	515	4000	58	0.2	1	64.6	68	1	92	6.5	SMB
SM6T75AY	SM6T75CAY	600	515	4000	64	0.2	1	71.3	75	1	103	5.8	SMB
SM6T82AY	SM6T82CAY	600	515	4000	70	0.2	1	77.8	81.9	1	113	5.5	SMB

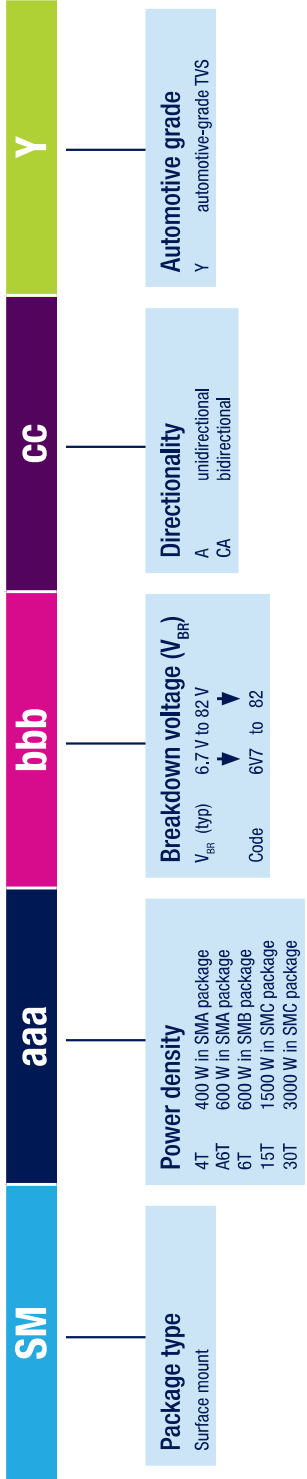
Automotive-grade 1500 W Transil™ (TVS), ISO 7637-2 compliant (pulses 1, 2, 3a, 3b)

Part number		Peak pulse power (P _{pp}) 10/1000 μs @ 25 °C	Peak pulse power (P _{pp}) 10/1000 μs @ 150 °C	Peak pulse power (P _{pp}) 8/20 μs	Stand-off voltage (V _{rm})	Leakage current (I _{rm}) @ V _{rm}		Breakdown voltage (V _{BR}) @ I _r			Clamping voltage (V _{cl}) @ I _{cp} 10/1000 μs		Junction temperature (T _j)	Package
Unidirectional	Bidirectional					(W)	(W)	(kV)	(V)	@ 25 °C max (μA)	@ 85 °C max (μA)	min (V)		
SM15TY series														
SM15T68AY	SM15T68CAY	1500	1250	10000	5.8	500	2000	6.45	6.8	10	10.5	143	150	SMC
SM15T76AY	SM15T76CAY	1500	1250	10000	6.4	250	1000	7.13	7.5	10	11.3	132	150	SMC
SM15T10AY	SM15T10CAY	1500	1250	10000	8.55	10	50	9.5	10	1	14.5	103	150	SMC
SM15T12AY	SM15T12CAY	1500	1250	10000	10.2	0.2	1	11.4	12	1	16.7	90	150	SMC
SM15T15AY	SM15T15CAY	1500	1250	10000	12.8	0.2	1	14.3	15	1	21.2	71	150	SMC
SM15T18AY	SM15T18CAY	1500	1250	10000	15.3	0.2	1	17.1	18	1	25.2	59.5	150	SMC
SM15T22AY	SM15T22CAY	1500	1250	10000	18.8	0.2	1	20.9	22	1	30.6	49	150	SMC
SM15T24AY	SM15T24CAY	1500	1250	10000	20.5	0.2	1	22.8	24	1	33.2	45	150	SMC
SM15T27AY	SM15T27CAY	1500	1250	10000	23.1	0.2	1	25.7	27	1	37.5	40	150	SMC
SM15T30AY	SM15T30CAY	1500	1250	10000	25.6	0.2	1	28.5	30	1	41.5	36	150	SMC
SM15T33AY	SM15T33CAY	1500	1250	10000	28.2	0.2	1	31.4	33	1	45.7	33	150	SMC
SM15T36AY	SM15T36CAY	1500	1250	10000	30.8	0.2	1	34.2	36	1	49.9	30	150	SMC
SM15T39AY	SM15T39CAY	1500	1250	10000	33.3	0.2	1	37.1	39	1	53.9	28	150	SMC
SM15T47AY	SM15T47CAY	1500	1250	10000	40.2	0.2	1	44.7	47	1	64.5	23.2	150	SMC
SM15T56AY	SM15T56CAY	1500	1250	10000	48	0.2	1	53.3	56	1	77.4	20	150	SMC
SM15T68AY	SM15T68CAY	1500	1250	10000	58.1	0.2	1	64.6	68	1	92	16.3	150	SMC
SM15T75AY	SM15T75CAY	1500	1250	10000	64.1	0.2	1	71.3	75	1	1.3	14.6	150	SMC
SM15T82AY	SM15T82CAY	1500	1250	10000	70	0.2	1	77.8	82	1	113	13.9	150	SMC

Automotive-grade 3000 W Transil™ (TVS), ISO 7637-2 compliant (pulses 1, 2, 3a, 3b)

Part number		Peak pulse power (P _{10/1000}) 10/1000 μs @ 25 °C	Peak pulse power (P _{10/1000}) 10/1000 μs @ 150 °C	Peak pulse power (P _{8/20}) 8/20 μs	Stand-off voltage (V _{RM})	Leakage current (I _{RM}) @ V _{RM}		Breakdown voltage (V _{BR}) @ I _R		Clamping voltage (V _{CL}) @ I _{CP} 10/1000 μs		Junction temperature (T _J)	Package
Unidirectional	Bidirectional	(W)	(W)	(kW)	(V)	@ 25 °C max (μA)	@ 85 °C max (μA)	min (V)	typ (V)	max (V)	(A)	max (°C)	
SM30TY series													
SM30T18AY	SM30T18CAY	3000	2200	28000	15	0.2	-	16.7	17.6	1	30.0	150	SMC
SM30T19AY	SM30T19CAY	3000	2200	28000	16	0.2	-	17.8	18.7	1	31.5	150	SMC
SM30T21AY	SM30T21CAY	3000	2200	28000	18	0.2	-	20	21.1	1	35.0	150	SMC
SM30T23AY	SM30T23CAY	3000	2200	28000	20	0.2	-	22.2	23.4	1	37.5	150	SMC
SM30T26AY	SM30T26CAY	3000	2200	28000	22	0.2	-	24.4	25.7	1	40.5	150	SMC
SM30T28AY	SM30T28CAY	3000	2200	28000	24	0.2	-	26.7	28.1	1	43.9	150	SMC
SM30T30AY	SM30T30CAY	3000	2200	28000	26	0.2	-	28.9	30.4	1	47.0	150	SMC
SM30T33AY	SM30T33CAY	3000	2200	28000	28	0.2	-	31.1	32.7	1	50.0	150	SMC
SM30T35AY	SM30T35CAY	3000	2200	28000	30	0.2	-	33.3	35.1	1	53.0	150	SMC
SM30T39AY	SM30T39CAY	3000	2200	28000	33	0.2	-	36.7	38.6	1	58.0	150	SMC

AUTOMOTIVE POWER-RAIL TVS PROTECTION ORDERING INFORMATION



SM

Package type

Surface mount

aaa

Power density

- 4T 400 W in SMA package
- A6T 600 W in SMA package
- 6T 600 W in SMB package
- 15T 1500 W in SMC package
- 30T 3000 W in SMC package

bbb

Breakdown voltage (V_{BR})

V_{BR} (typ) 6.7 V to 82 V

Code 6V7 to 82

CC

Directionality

- A unidirectional
- CA bidirectional

Y

Automotive grade

Y automotive-grade TVS

AUTOMOTIVE-GRADE SCHOTTKY DIODES

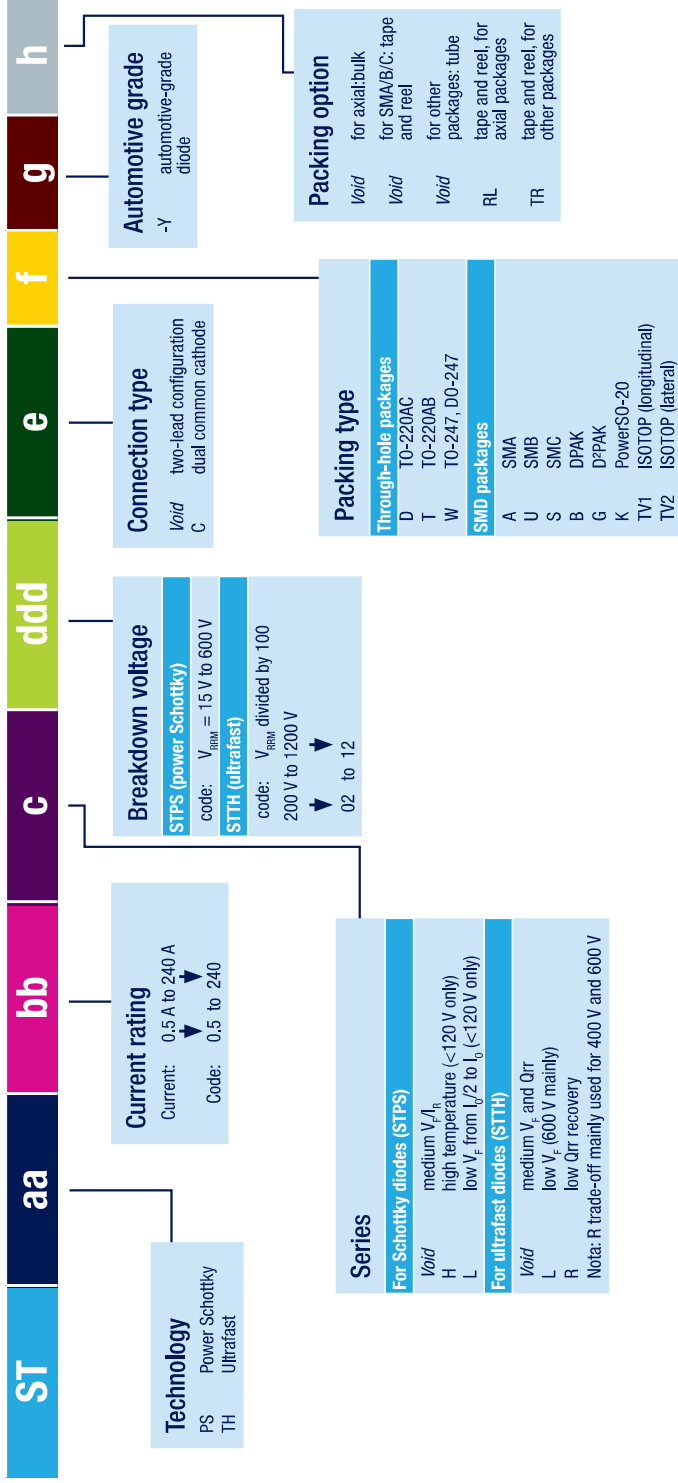
Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})		Average rectified current (I_p)	Forward voltage (V_f)		V_f measure condition (@ I_p)	Reverse current (I_r)	Non-repetitive peak forward surge current (I_{FSM})		Junction temperature (T_j)	
			max (V)	max (V)		max (A)	max (V)			(A)	max (mA)	max (A)	max (°C)
30 V													
STPS8L30-Y	DPAK	1	30	30	8	0.4	0.4	1	1	75	150		
STPS60L30C-Y	PowerSO-20	2	30	30	2 x 30	0.49	30	2	2	250	150		
40 V													
BAT54-Y	SOT-23, SOT-323	1, 2	40	40	0.3	0.9	0.1	0.001	0.001	1	150		
STPS0540-Y	SOD-123	1	40	40	0.5	0.5	0.5	0.04	0.04	5.5	150		
STPS140-Y	SMA, SMB	1	40	40	1	0.55	1	0.012	0.012	60	150		
STPS140Z-Y	SOD-123	1	40	40	1	0.55	1	0.012	0.012	5.5	150		
STPS1L40-Y	SMA, SMB	1	40	40	1	0.42	1	0.035	0.035	60	150		
STPS340-Y	SMB, SMC	1	40	40	3	0.63	3	0.02	0.02	75	150		
STPS3L40-Y	SMC	1	40	40	3	0.5	3	0.1	0.1	75	150		
STPS640C-Y	DPAK	2	40	40	2 x 3	0.57	3	0.1	0.1	75	150		
45 V													
STPS1045B-Y	DPAK	1	45	45	10	0.63	10	0.1	0.1	75	175		
STPS1545-Y	TO-220AC	1	45	45	15	0.57	15	0.2	0.2	220	175		
STPS1545C-Y	D ² PAK	2	45	45	2 x 7.5	0.84	15	0.1	0.1	150	175		
STPS15L45C-Y	DPAK	2	45	45	2 x 7.5	0.64	15	1	1	75	150		
STPS2045C-Y	D ² PAK	2	45	45	2 x 10	0.84	20	0.1	0.1	180	175		
STPS2545C-Y	D ² PAK	2	45	45	2 x 12.5	0.84	25	0.125	0.125	200	175		
STPS2545CT-Y	TO-220AB	2	45	45	2 x 12.5	0.84	25	0.125	0.125	200	175		
STPS3045C-Y	D ² PAK	2	45	45	2 x 15	0.84	30	0.2	0.2	220	175		
STPS4045C-Y	TO-247	2	45	45	2 x 20	0.76	20	0.2	0.2	220	175		
STPS40L45C-Y	D ² PAK	2	45	45	2 x 20	0.49	20	0.6	0.6	230	150		
60 V													
STPS160-Y	SMA, SMB	1	60	60	1	0.57	1	4	4	75	150		
STPS2L60-Y	SMA	1	60	60	2	0.6	2	0.1	0.1	75	150		
STPS3L60-Y	SMC	1	60	60	3	0.65	3	0.055	0.055	75	150		
STPS3L60U-Y	SMB	1	60	60	3	0.62	3	0.15	0.15	100	150		

AUTOMOTIVE-GRADE SCHOTTKY DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V_{RRM})		Average rectified current (I_A)	Forward voltage (V_f)		V_f measure condition (@ I_f)	Reverse current (I_R)	Non-repetitive peak forward surge current (I_{FSM})	Junction temperature (T_j)
			max (V)	V_{RRM}		max (V)	max (V)				
STPS5L60-Y	SMC	1	60		5	0.48	5	max (mA)	150	max (A)	150
STPS20L60C-Y	D2PAK	2	60		2 x 10	0.6	10		220		150
STPS30H60C-Y	D2PAK	2	60		2 x 15	0.57	15		230		175
STPS30H60C-Y	PowerSO-20	2	60		2 x 15	0.58	15		250		150
100 V											
STPS1H100-Y	SMA, SMB	1	100		1	0.77	1	0.004	50		175
STPS2H100-Y	SMA, SMB	1	100		2	0.79	2	0.001	75		175
STPS5H100-Y	DPAK	1	100		5	0.79	5	0.004	75		175
STPS15H100C-Y	DPAK	2	100		2 x 7.5	0.8	7.5	0.003	75		175
STPS41H100C-Y	D2PAK	2	100		2 x 20	0.8	20	0.01	220		175
150 V											
STPS1150-Y	SMA	1	150		1	0.67	1	0.001	50		175
STPS3150-Y	SMB	1	150		3	0.82	3	0.002	80		175
170 V											
STPS40170C-Y	D2PAK	2	170		2 x 20	0.92	20	0.03	250		175
STPS200170TV1Y	ISOTOP	2	170		200	0.85	100	0.2	700		150

AUTOMOTIVE-GRADE ULTRAFAST DIODES

Part number	Package	Number of diodes	Repetitive peak reverse voltage (V _{RRM})		Average rectified current (I _A)	Forward voltage (V _F)	V _r measure condition (@ I _F)	Reverse current (I _R)	Reverse recovery time (t _{rr})		Non-repetitive peak forward surge current (I _{FSM})	Junction temperature (T _J)
			max (V)	max (V)					max (ns)	max (ns)		
200 V and 300 V												
STTH102-Y	SMA	1	200	0.97	1	1	0.001	20	40	175		
STTH2R02-Y	SMB	1	200	1	2	2	0.003	20	75	175		
STTH4R02-Y	SMB, SMC	1	200	1.05	4	4	0.003	20	70	175		
STTH602C-Y	DPAK	2	200	0.95	2 x 3	3	0.003	20	60	175		
STTH802-Y	DPAK	1	200	1.05	8	8	0.006	30	100	175		
STTH1002C-Y	D ² PAK, DPAK	2	200	1.1	2 x 5	5	0.005	20	50	175		
STTH1003S-Y	DPAK	1	300	1.3	10	10	0.1	35	100	175		
STTH2003C-Y	D ² PAK	2	300	1.25	2 x 10	10	0.02	40	110	175		
400 V												
STTH1R04-Y	SMA, SMB	1	400	1.6	1	1	0.005	30	30	175		
STTH30R04-Y	TO-220AC, DO-247	1	400	1.55	30	30	0.015	280	45	175		
600 V												
STTH5R06B-Y	DPAK	1	600	3.2	5	5	0.03	35	50	175		
STTH5R06G-Y	D ² PAK	1	600	3.2	5	5	0.03	35	70	175		
STTH8R06-Y	D ² PAK	1	600	3.2	8	8	0.03	45	90	175		
STTH30L06-Y	D ² PAK, DO-247	1	600	1.55	30	30	0.025	65	300	175		
1000 V												
STTH810-Y	D ² PAK	1	1000	2	8	8	0.005	85	60	175		
STTH1210-Y	TO-220AC	1	1000	2	12	12	0.01	90	80	175		
STTH3010-Y	D ² PAK, DO-247	1	1000	2	30	30	0.015	100	300	175		
STTH6010-Y	DO-247	1	1000	1.7	60	60	0.02	65	400	175		
1200 V												
STTH1512-Y	D ² PAK	1	1200	2.1	15	15	0.015	75	200	175		



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