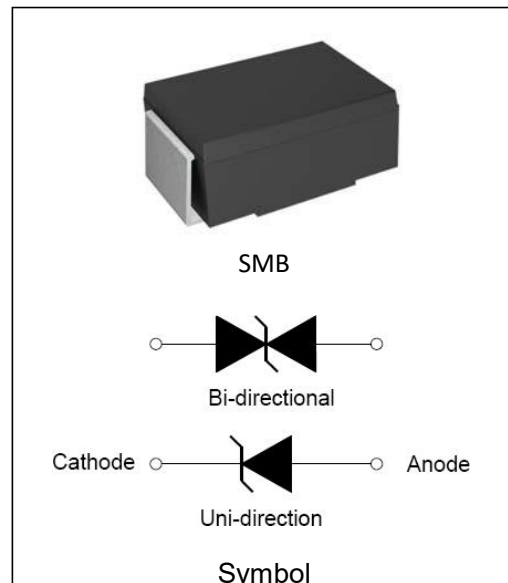


DESCRIPTION:

TVS diodes can be used in a wide range of applications which like consumer electronic products, automotive industries, munitions, telecommunications, aerospace industries, and intelligent control systems.

FEATURES:

- ✧ Glass passivated or planar junction
- ✧ Lower clamping voltage.
- ✧ High temperature soldering: 260°C/10s at terminals.
- ✧ Plastic package has Underwriters Laboratory Flammability 94V-0.
- ✧ Surface mount DO-214AC.
- ✧ Fast response time: typically less than 1.0ps from 0V to VBR min.
- ✧ IEC61000-4-2 (ESD) ±30kV (air), ±30kV (contact).
- ✧ High reliability application and automotive grade (AEC-Q101 qualified).
- ✧ 1000W peak pulse power capability at 10×1000μs waveform.



Absolute Maximum Ratings (TA=25°C, RH=45%-75%, unless otherwise noted)

Parameter	Symbol	Value	Unit
Storage and operating junction temperature range	T_{STG}/T_J	-55 to +150	°C
Peak pulse power dissipation on 10/1000μs waveform	P_{PP}	1000	W

MARKING



Screscreen and model

ELECTRICAL CHARACTERISTICS (TA=25°C)

Part Number		Marking		V _R	I _R @ V _R	V _{BR} @I _T		I _T	V _C @I _{PP}	I _{PP} ^①
Uni-Polar	Bi-Polar	Uni	Bi	V	μA	min(V)	max(V)	mA	max(V)	A
10BJ5.0AH	10BJ5.0CAH	A5	C5	5.0	200	6.40	7.00	10	9.2	108.7
10BJ6.0AH	10BJ6.0CAH	A6	C6	6.0	200	6.67	7.37	10	10.3	97.1
10BJ6.5AH	10BJ6.5CAH	A6V	C6V	6.5	100	7.22	7.98	10	11.2	89.3
10BJ7.0AH	10BJ7.0CAH	A7	C7	7.0	80	7.78	8.60	10	12.0	83.4
10BJ7.5AH	10BJ7.5CAH	A7V	C7V	7.5	50	8.33	9.21	1	12.9	77.6
10BJ8.0AH	10BJ8.0CAH	A8	C8	8.0	20	8.89	9.83	1	13.6	73.6
10BJ8.5AH	10BJ8.5CAH	A8V	C8V	8.5	10	9.44	10.40	1	14.4	69.5
10BJ9.0AH	10BJ9.0CAH	A9	C9	9.0	5	10.00	11.10	1	15.4	65.0
10BJ10AH	10BJ10CAH	A10	C10	10	2	11.10	12.30	1	17.0	58.9
10BJ11AH	10BJ11CAH	A11	C11	11	1	12.20	13.50	1	18.2	55.0
10BJ12AH	10BJ12CAH	A12	C12	12	1	13.30	14.70	1	19.9	50.3
10BJ13AH	10BJ13CAH	A13	C13	13	1	14.40	15.90	1	21.5	46.6
10BJ14AH	10BJ14CAH	A14	C14	14	1	15.60	17.20	1	23.2	43.1
10BJ15AH	10BJ15CAH	A15	C15	15	1	16.70	18.50	1	24.4	41.0
10BJ16AH	10BJ16CAH	A16	C16	16	1	17.80	19.70	1	26.0	38.5
10BJ17AH	10BJ17CAH	A17	C17	17	1	18.90	20.90	1	27.6	36.3
10BJ18AH	10BJ18CAH	A18	C18	18	1	20.00	22.10	1	29.2	34.3
10BJ20AH	10BJ20CAH	A20	C20	20	1	22.20	24.50	1	32.4	30.9
10BJ22AH	10BJ22CAH	A22	C22	22	1	24.40	26.90	1	35.5	28.2
10BJ24AH	10BJ24CAH	A24	C24	24	1	26.70	29.50	1	38.9	25.7
10BJ26AH	10BJ26CAH	A26	C26	26	1	28.90	31.90	1	42.1	23.8
10BJ28AH	10BJ28CAH	A28	C28	28	1	31.10	34.40	1	45.4	22.1
10BJ30AH	10BJ30CAH	A30	C30	30	1	33.30	36.80	1	48.4	20.7
10BJ33AH	10BJ33CAH	A33	C33	33	1	36.70	40.60	1	53.3	18.8
10BJ36AH	10BJ36CAH	A36	C36	36	1	40.00	44.20	1	58.1	17.3
10BJ40AH	10BJ40CAH	A40	C40	40	1	44.40	49.10	1	64.5	15.5
10BJ43AH	10BJ43CAH	A43	C43	43	1	47.80	52.80	1	69.4	14.4
10BJ45AH	10BJ45CAH	A45	C45	45	1	50.00	55.30	1	72.7	13.8
10BJ48AH	10BJ48CAH	A48	C48	48	1	53.30	58.90	1	77.4	13.0
10BJ51AH	10BJ51CAH	A51	C51	51	1	56.70	62.70	1	82.4	12.2

Part Number		Marking		V_R	$I_R@V_R$	$V_{BR}@I_T$		I_T	$V_C@I_{PP}$	$I_{PP}①$
Uni-Polar	Bi-Polar	Uni	Bi	V	μA	min(V)	max(V)	mA	max(V)	A
10BJ54AH	10BJ54CAH	A54	C54	54	1	60.00	66.30	1	87.1	11.5
10BJ58AH	10BJ58CAH	A58	C58	58	1	64.40	71.20	1	93.6	10.7
10BJ60AH	10BJ60CAH	A60	C60	60	1	66.70	73.70	1	96.8	10.4
10BJ64AH	10BJ64CAH	A64	C64	64	1	71.10	78.60	1	103.0	9.7
10BJ70AH	10BJ70CAH	A70	C70	70	1	77.80	86.00	1	113.0	8.9
10BJ75AH	10BJ75CAH	A75	C75	75	1	83.30	92.10	1	121.0	8.3
10BJ78AH	10BJ78CAH	A78	C78	78	1	86.70	95.80	1	126.0	8.0
10BJ85AH	10BJ85CAH	A85	C85	85	1	94.40	104.0	1	137.0	7.3
10BJ90AH	10BJ90CAH	A90	C90	90	1	100.0	111.0	1	146.0	6.9
10BJ100AH	10BJ100CAH	A100	C100	100	1	111.0	123.0	1	162.0	6.2
10BJ110AH	10BJ110CAH	A110	C110	110	1	122.0	135.0	1	177.0	5.7
10BJ120AH	10BJ120CAH	A120	C120	120	1	133.0	147.0	1	193.0	5.2
10BJ130AH	10BJ130CAH	A130	C130	130	1	144.0	159.0	1	209.0	4.8
10BJ150AH	10BJ150CAH	A150	C150	150	1	167.0	185.0	1	243.0	4.2
10BJ160AH	10BJ160CAH	A160	C160	160	1	178.0	197.0	1	259.0	3.9
10BJ170AH	10BJ170CAH	A170	C170	170	1	189.0	209.0	1	275.0	3.7
10BJ180AH	10BJ180CAH	A180	C180	180	1	201.0	222.0	1	292.0	3.5
10BJ190AH	10BJ190CAH	A190	C190	190	1	211.0	234.0	1	307.0	3.3
10BJ200AH	10BJ200CAH	A200	C200	200	1	224.0	247.0	1	324.0	3.1

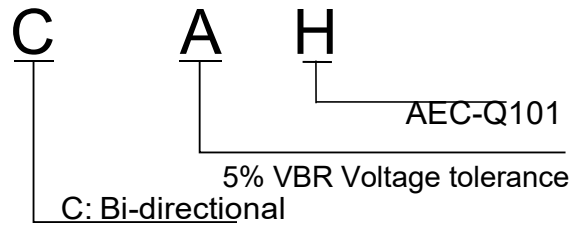
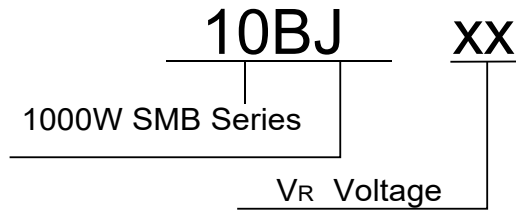
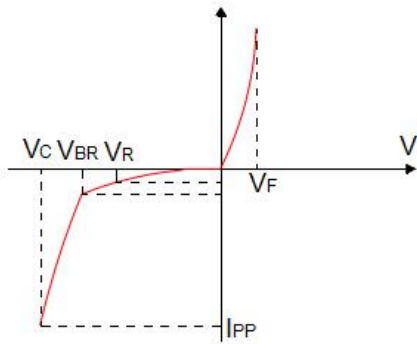
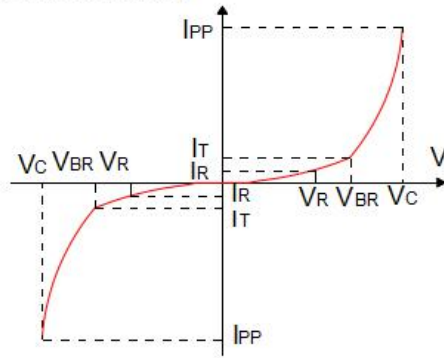
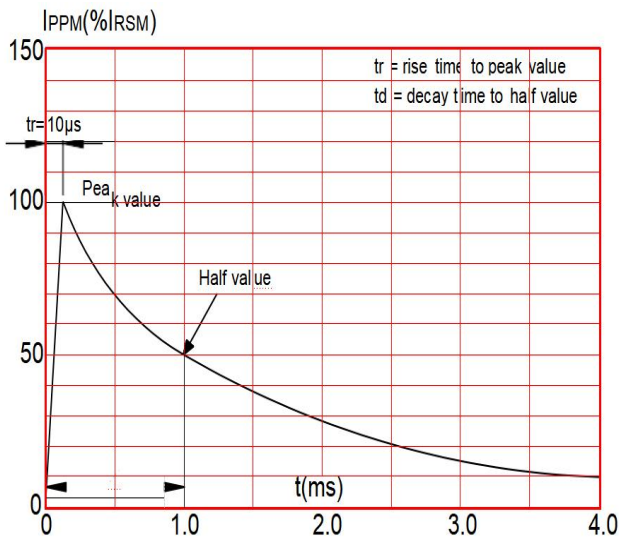
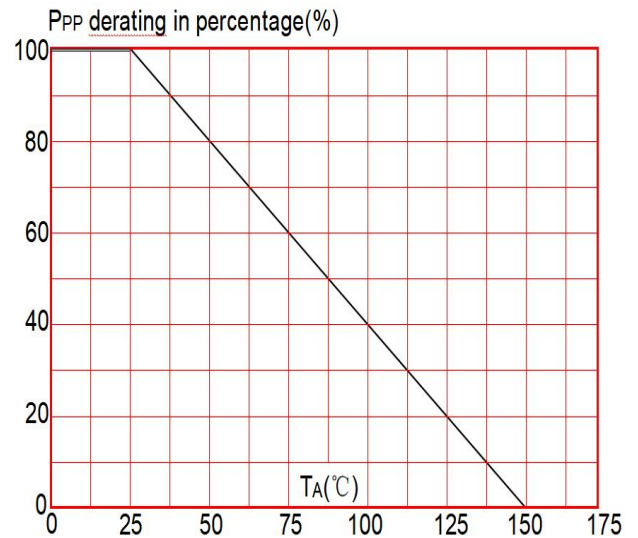
Surge waveform: 10/1000 μs

V_R : Stand-off Voltage -- Maximum voltage that can be applied

V_{BR} : Breakdown Voltage

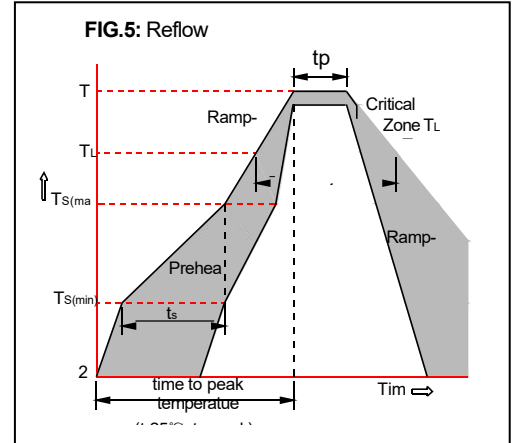
V_C : Clamping Voltage -- Peak voltage measured across the suppressor at a specified I_{PP}

I_R : Reverse Leakage Current

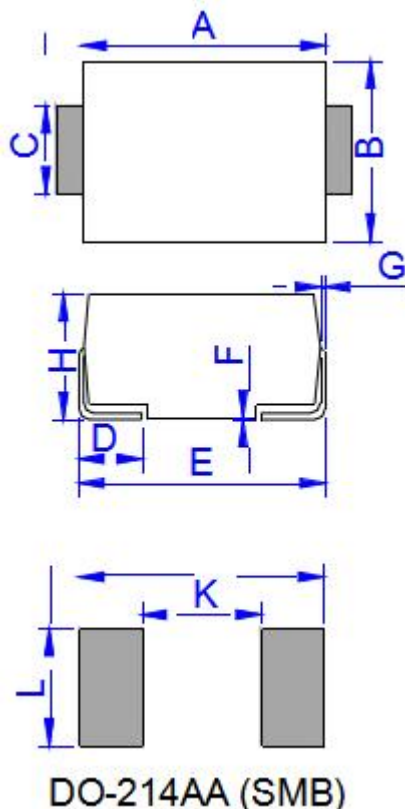
ORDERING INFORMATION

Ratings AND V - I characteristic CURVES (T_A=25°C, unless otherwise noted)
FIG.1:V- I curve characteristics (Uni-directional)

FIG.2:V- I curve characteristics (Bi-directional)

FIG.3: Pulse waveform

FIG.4: Pulse derating curve


SOLDERING PARAMETERS

Reflow Condition		Pb-Free assembly (see FIG.5)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150°C
	-Temperature Max($T_{s(max)}$)	+200°C
	-Time (Min to Max) (t_s)	60-180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3°C/sec. Max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/sec. Max
Reflow	-Temperature(T_L)(Liquid us)	+217°C
	-Temperature(t_L)	60-150 secs.
Peak Temp (T_P)		+260(+0/-5)°C
Time within 5°C of actual Peak Temp (t_p)		30 secs. Max
Ramp-down Rate		6°C/sec. Max
Time 25°C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260°C

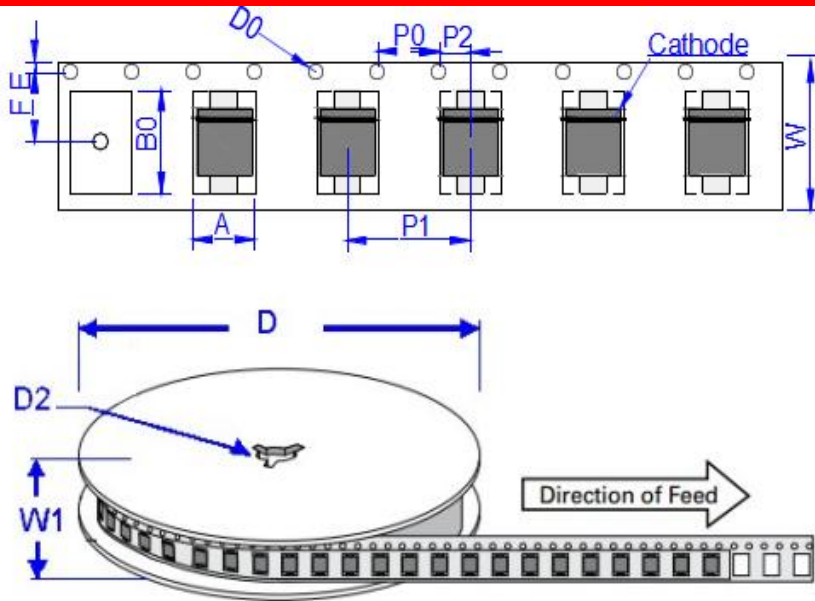


PACKAGE MECHANICAL DATA



Ref.	Dimensions			
	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	4.25	4.75	0.167	0.187
B	3.30	3.94	0.130	0.155
C	1.85	2.21	0.073	0.087
D	0.76	1.52	0.030	0.060
E	5.08	5.59	0.200	0.220
F	0.051	0.203	0.002	0.008
G	0.15	0.31	0.006	0.012
H	2.11	2.44	0.083	0.096
J	6.80		0.270	
K		2.60		0.100
L	2.40		0.090	

TAPE AND REEL SPECIFICATION - SMB



Ref.	Dimensions	
	Millimeters	Inches
A	3.76 ± 0.3	0.148 ± 0.012
B0	5.69 ± 0.3	0.224 ± 0.012
D	330.0	13.0
D0	1.55 ± 0.1	0.061 ± 0.004
E	1.75 ± 0.2	0.069 ± 0.008
D2	13.3 ± 0.3	0.524 ± 0.012
F	5.5 ± 0.2	0.217 ± 0.008
P0	4.00 ± 0.2	0.157 ± 0.008
P1	8.00 ± 0.2	0.3145 ± 0.008
P2	2.00 ± 0.2	0.079 ± 0.008
W	12.0 ± 0.2	0.472 ± 0.008
W1	15.7 ± 2.0	0.618 ± 0.079

OUTLINE	REEL (PCS)	PER CARTON (PCS)	REEL DIAMETERS (mm)
TAPING	3,000	48,000	330