

# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$		$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.		UNI-	BI-			
	V	V	V	mA	$\mu A$	$\mu A$	V	A	

## 200 Watts

SMF5.0A	5.0	6.40	7.00	10	400	800	9.2	21.74	SOD-123FL (No.: 16)	T.V.S.
SMF6.0A	6.0	6.67	7.37	10	400	800	10.3	19.42		
SMF6.5A	6.5	7.22	7.98	10	250	500	11.2	17.86		
SMF7.0A	7.0	7.78	8.60	10	100	200	12.0	16.67		
SMF7.5A	7.5	8.33	9.21	1	50	100	12.9	15.50		
SMF8.0A	8.0	8.89	9.83	1	25	50	13.6	14.71		
SMF8.5A	8.5	9.44	10.4	1	10	20	14.4	13.89		
SMF9.0A	9.0	10.0	11.1	1	5	10	15.4	12.99		
SMF10A	10	11.1	12.3	1	2.5		17.0	11.76		
SMF11A	11	12.2	13.5	1	2.5		18.2	10.99		
SMF12A	12	13.3	14.7	1	1		19.9	10.05		
SMF13A	13	14.4	15.9	1	1		21.5	9.30		
SMF14A	14	15.6	17.2	1	1		23.2	8.62		
SMF15A	15	16.7	18.5	1	1		24.4	8.20		
SMF16A	16	17.8	19.7	1	1		26.0	7.69		
SMF17A	17	18.9	20.9	1	1		27.6	7.25		
SMF18A	18	20.0	22.1	1	1		29.2	6.85		
SMF19A	19	21.1	23.3	1	1		30.6	6.54		
SMF20A	20	22.2	24.5	1	1		32.4	6.17		
SMF22A	22	24.4	26.9	1	1		35.5	5.63		
SMF24A	24	26.7	29.5	1	1		38.9	5.14		
SMF26A	26	28.9	31.9	1	1		42.1	4.75		
SMF28A	28	31.1	34.4	1	1		45.4	4.41		
SMF30A	30	33.3	36.8	1	1		48.4	4.13		
SMF33A	33	36.7	40.6	1	1		53.3	3.75		
SMF36A	36	40.0	44.2	1	1		58.1	3.44		
SMF40A	40	44.4	49.1	1	1		64.5	3.10		
SMF43A	43	47.8	52.8	1	1		69.4	2.88		
SMF45A	45	50.0	55.3	1	1		72.7	2.75		
SMF48A	48	53.3	58.9	1	1		77.4	2.58		
SMF51A	51	56.7	62.7	1	1		82.4	2.43		
SMF54A	54	60.0	66.3	1	1		87.1	2.30		
SMF58A	58	64.4	71.2	1	1		93.6	2.14		
SMF60A	60	66.7	73.7	1	1		96.8	2.07		
SMF64A	64	71.1	78.6	1	1		103	1.94		
SMF70A	70	77.8	86.0	1	1		113	1.77		
SMF75A	75	83.3	92.1	1	1		121	1.65		
SMF78A	78	86.7	95.8	1	1		126	1.59		
SMF80A	80	88.8	97.6	1	1		129	1.55		
SMF85A	85	94.4	104	1	1		137	1.46		
SMF90A	90	100	111	1	1		146	1.37		
SMF100A	100	111	123	1	1		162	1.23		
SMF110A	110	122	135	1	1		177	1.13		
SMF120A	120	133	147	1	1		193	1.04		
SMF130A	130	144	159	1	1		209	0.96		
SMF140A	140	155	171	1	1		224	0.89		
SMF150A	150	167	185	1	1		243	0.82		
SMF160A	160	178	197	1	1		259	0.77		
SMF170A	170	189	209	1	1		275	0.73		
SMF180A	180	200	220	1	1		292	0.68		
SMF190A	190	211	232	1	1		308	0.65		
SMF200A	200	224	247	1	1		324	0.62		
SMF220A	220	246	272	1	1		356	0.56		

NOTE: 1. Suffix "A" indicates  $\pm 5\%$  Tolerance.

2. For Bidirectional use "C" of "CA" suffix for types. (e.g.: SMF5.0C, SMF5.0CA, SMF40C, SMF40CA,...etc.), electrical characteristics apply in both directions.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	<div style="border: 1px solid black; padding: 5px; display: inline-block;">                     Package Outline Drawing No. Please refer to Page: 131~139                 </div>
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>		V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.		UNI-	BI-			
V	V	V	mA	µA	µA	V	A		

### 400 Watts

SMAJ5.0	5.0	6.40	7.55	10	800	1600	9.6	41.6
SMAJ5.0A	5.0	6.40	7.25	10	800	1600	9.2	43.5
SMAJ6.0	6.0	6.67	8.45	10	800	1600	11.4	35.1
SMAJ6.0A	6.0	6.67	7.67	10	800	1600	10.3	38.8
SMAJ6.5	6.5	7.22	9.14	10	500	1000	12.3	32.5
SMAJ6.5A	6.5	7.22	8.30	10	500	1000	11.2	35.7
SMAJ7.0	7.0	7.78	9.86	10	200	400	13.3	30.1
SMAJ7.0A	7.0	7.78	8.95	10	200	400	12.0	33.3
SMAJ7.5	7.5	8.33	10.67	1	100	200	14.3	28.0
SMAJ7.5A	7.5	8.33	9.58	1	100	200	12.9	31.0
SMAJ8.0	8.0	8.89	11.30	1	50	100	15.0	26.5
SMAJ8.0A	8.0	8.89	10.23	1	50	100	13.6	29.4
SMAJ8.5	8.5	9.44	11.92	1	10	20	15.9	25.1
SMAJ8.5A	8.5	9.44	10.82	1	10	20	14.4	27.7
SMAJ9.0	9.0	10.0	12.6	1	5	10	16.9	23.6
SMAJ9.0A	9.0	10.0	11.5	1	5	10	15.4	26.0
SMAJ10	10	11.1	14.1	1	5		18.8	21.2
SMAJ10A	10	11.1	12.8	1	5		17.0	23.5
SMAJ11	11	12.2	15.4	1	5		20.1	20.0
SMAJ11A	11	12.2	14.0	1	5		18.2	22.0
SMAJ12	12	13.3	16.9	1	5		22.0	18.1
SMAJ12A	12	13.3	15.3	1	5		19.9	20.1
SMAJ13	13	14.4	18.2	1	5		23.8	16.8
SMAJ13A	13	14.4	16.5	1	5		21.5	18.6
SMAJ14	14	15.6	19.8	1	5		25.8	15.5
SMAJ14A	14	15.6	17.9	1	5		23.2	17.2
SMAJ15	15	16.7	21.1	1	5		26.9	14.8
SMAJ15A	15	16.7	19.2	1	5		24.4	16.4
SMAJ16	16	17.8	22.6	1	5		28.8	13.8
SMAJ16A	16	17.8	20.5	1	5		26.0	15.3
SMAJ17	17	18.9	23.9	1	5		30.5	13.1
SMAJ17A	17	18.9	21.7	1	5		27.6	14.5
SMAJ18	18	20.0	25.3	1	5		32.2	12.4
SMAJ18A	18	20.0	23.3	1	5		29.2	13.7
SMAJ20	20	22.2	28.1	1	5		35.8	11.1
SMAJ20A	20	22.2	25.5	1	5		32.4	12.3
SMAJ22	22	24.4	30.9	1	5		39.4	10.1
SMAJ22A	22	24.4	28.0	1	5		35.5	11.2
SMAJ24	24	26.7	33.8	1	5		43.0	9.3
SMAJ24A	24	26.7	30.7	1	5		38.9	10.3
SMAJ26	26	28.9	36.6	1	5		46.6	8.6
SMAJ26A	26	28.9	33.2	1	5		42.1	9.5
SMAJ28	28	31.1	39.4	1	5		50.0	8.0
SMAJ28A	28	31.1	35.8	1	5		45.4	8.8
SMAJ30	30	33.3	42.2	1	5		53.5	7.5
SMAJ30A	30	33.3	38.3	1	5		48.4	8.3
SMAJ33	33	36.7	46.5	1	5		59.0	6.8
SMAJ33A	33	36.7	42.2	1	5		53.3	7.5
SMAJ36	36	40.0	50.7	1	5		64.3	6.2
SMAJ36A	36	40.0	46.0	1	5		58.1	6.9
SMAJ40	40	44.4	56.3	1	5		71.4	5.6
SMAJ40A	40	44.4	51.1	1	5		64.5	6.2
SMAJ43	43	47.8	60.5	1	5		76.7	5.2
SMAJ43A	43	47.8	54.9	1	5		69.4	5.7

SMA  
(DO-214AC)  
(No.: 28)



NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMAJ5.0C, SMAJ5.0CA, SMAJ43C, SMAJ43CA,...etc.), electrical characteristics apply in both directions.

# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	<div style="border: 1px solid black; padding: 5px; text-align: center;">                     Package Outline Drawing No. Please refer to Page: 131~139                 </div>
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>		V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.		UNI-	BI-			
V	V	V	V	mA	μA	μA	V	A	

## 400 Watts

SMAJ45	45	50.0	63.3	1	5	80.3	5.0
SMAJ45A	45	50.0	57.5	1	5	72.7	5.5
SMAJ48	48	53.3	67.5	1	5	85.5	4.7
SMAJ48A	48	53.3	61.3	1	5	77.4	5.2
SMAJ51	51	56.7	71.8	1	5	91.1	4.4
SMAJ51A	51	56.7	65.2	1	5	82.4	4.9
SMAJ54	54	60.0	76.0	1	5	96.3	4.2
SMAJ54A	54	60.0	69.0	1	5	87.1	4.6
SMAJ58	58	64.4	81.6	1	5	103.0	3.9
SMAJ58A	58	64.4	74.1	1	5	93.6	4.3
SMAJ60	60	66.7	84.5	1	5	107.0	3.7
SMAJ60A	60	66.7	76.7	1	5	96.8	4.1
SMAJ64	64	71.1	90.1	1	5	114	3.5
SMAJ64A	64	71.1	81.8	1	5	103	3.9
SMAJ70	70	77.8	98.6	1	5	125	3.2
SMAJ70A	70	77.8	89.5	1	5	113	3.5
SMAJ75	75	83.3	105.7	1	5	134	3.0
SMAJ75A	75	83.3	95.8	1	5	121	3.3
SMAJ78	78	86.7	109.8	1	5	139	2.9
SMAJ78A	78	86.7	99.7	1	5	126	2.2
SMAJ85	85	94.4	119.2	1	5	151	2.6
SMAJ85A	85	94.4	108.2	1	5	137	2.9
SMAJ90	90	100	126.5	1	5	160	2.5
SMAJ90A	90	100	115.5	1	5	146	2.7
SMAJ100	100	111	141.0	1	5	179	2.2
SMAJ100A	100	111	128.0	1	5	162	2.5
SMAJ110	110	122	154.5	1	5	196	2.0
SMAJ110A	110	122	140.5	1	5	177	2.3
SMAJ120	120	133	169.0	1	5	214	1.9
SMAJ120A	120	133	153.0	1	5	193	2.0
SMAJ130	130	144	182.5	1	5	231	1.7
SMAJ130A	130	144	165.5	1	5	209	1.9
SMAJ150	150	167	211.5	1	5	268	1.5
SMAJ150A	150	167	192.5	1	5	243	1.6
SMAJ160	160	178	226.0	1	5	287	1.4
SMAJ160A	160	178	205.0	1	5	259	1.5
SMAJ170	170	189	239.5	1	5	304	1.3
SMAJ170A	170	189	217.5	1	5	275	1.4
SMAJ180	180	198	253.8	1	5	322	1.2
SMAJ180A	180	198	230.4	1	5	292	1.3
SMAJ190	190	209	267.9	1	5	340	1.2
SMAJ190A	190	209	243.2	1	5	308	1.3
SMAJ200	200	220	282.0	1	5	358	1.1
SMAJ200A	200	220	256.0	1	5	324	1.2
SMAJ210	210	231	296.1	1	5	376	1.1
SMAJ210A	210	231	268.8	1	5	340	1.2
SMAJ220	220	242	310.2	1	5	394	1.0
SMAJ220A	220	242	281.6	1	5	356	1.1

SMA  
(DO-214AC)  
(No.: 28)




NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMAJ45C, SMAJ45CA, SMAJ220C, SMAJ220CA,...etc.), electrical characteristics apply in both directions.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current	Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$	$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.					
	V	V	V	mA	$\mu$ A	V	A	

### 400 Watts

SMAFJ5.0A	5.0	6.4	7.0	10	200	9.2	21.7	SMAFL (No.: 32)	
SMAFJ6.0A	6.0	6.7	7.4	10	100	10.3	19.4		
SMAFJ6.5A	6.5	7.2	8.0	10	75	11.2	17.9		
SMAFJ7.0A	7.0	7.8	8.6	10	50	12.0	16.7		
SMAFJ7.5A	7.5	8.3	9.2	1	50	12.9	15.5		
SMAFJ8.0A	8.0	8.9	9.8	1	25	13.6	14.7		
SMAFJ8.5A	8.5	9.4	10.4	1	10	14.4	13.9		
SMAFJ9.0A	9.0	10.0	11.5	1	5	15.4	13.0		
SMAFJ10A	10	11.1	12.3	1	5	17.0	11.8		
SMAFJ11A	11	12.2	13.5	1	1	18.2	11.0		
SMAFJ12A	12	13.3	14.7	1	1	19.9	10.1		
SMAFJ13A	13	14.4	15.9	1	1	21.5	9.3		
SMAFJ14A	14	15.6	17.2	1	1	23.2	8.6		
SMAFJ15A	15	16.7	18.5	1	1	24.4	8.2		
SMAFJ16A	16	17.8	19.7	1	1	26.0	7.7		
SMAFJ17A	17	18.9	20.9	1	1	27.6	7.2		
SMAFJ18A	18	20.0	22.1	1	1	29.2	6.8		
SMAFJ20A	20	22.2	24.5	1	1	32.4	6.2		
SMAFJ22A	22	24.4	26.9	1	1	35.5	5.6		
SMAFJ24A	24	26.7	29.5	1	1	38.9	5.1		
SMAFJ26A	26	28.9	31.9	1	1	42.1	4.8		
SMAFJ28A	28	31.1	34.4	1	1	45.4	4.4		
SMAFJ30A	30	33.3	36.8	1	1	48.4	4.1		
SMAFJ33A	33	36.7	40.6	1	1	53.3	3.8		
SMAFJ36A	36	40.0	44.2	1	1	58.1	3.4		
SMAFJ40A	40	44.4	49.1	1	1	64.5	3.1		
SMAFJ43A	43	47.8	52.8	1	1	69.4	2.9		
SMAFJ45A	45	50.0	55.3	1	1	72.7	2.8		
SMAFJ48A	48	53.3	58.9	1	1	77.4	2.6		
SMAFJ51A	51	56.7	62.7	1	1	82.4	2.4		
SMAFJ54A	54	60.0	66.3	1	1	87.1	2.3		
SMAFJ58A	58	64.4	71.2	1	1	93.6	2.1		
SMAFJ60A	60	66.7	73.7	1	1	96.8	1.8		
SMAFJ64A	64	71.1	78.6	1	1	103	1.7		
SMAFJ70A	70	77.8	86.0	1	1	113	1.5		
SMAFJ75A	75	83.3	92.1	1	1	121	1.4		
SMAFJ78A	78	86.7	95.8	1	1	126	1.4		
SMAFJ85A	85	94.4	104	1	1	137	1.3		
SMAFJ90A	90	100	111	1	1	146	1.2		
SMAFJ100A	100	111	123	1	1	162	1.1		
SMAFJ110A	110	122	135	1	1	177	1.0		
SMAFJ120A	120	133	147	1	1	193	0.9		
SMAFJ130A	130	144	159	1	1	209	0.8		
SMAFJ150A	150	167	185	1	1	243	0.7		
SMAFJ160A	160	178	197	1	1	259	0.7		
SMAFJ170A	170	189	209	1	1	275	0.6		

NOTE: 1. Suffix "A" indicates  $\pm 5\%$  Tolerance.

T.V.S.

# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current	Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$	$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.					

## 600 Watts

SMBFJ6.8A	5.8	6.45	7.14	10	1000	10.5	58.1	SMBFL (No.: 33)	
SMBFJ7.5A	6.4	7.13	7.88	10	500	11.3	54.0		
SMBFJ8.2A	7.02	7.79	8.61	10	200	12.1	50.4		
SMBFJ9.1A	7.78	8.65	9.55	1	50	13.4	45.5		
SMBFJ10A	8.55	9.5	10.5	1	10	14.5	42.1		
SMBFJ11A	9.4	10.5	11.6	1	5	15.6	39.1		
SMBFJ12A	10.2	11.4	12.6	1	5	16.7	36.5		
SMBFJ13A	11.1	12.4	13.7	1	1	18.2	33.5		
SMBFJ15A	12.8	14.3	15.8	1	1	21.2	28.8		
SMBFJ16A	13.6	15.2	16.8	1	1	22.5	27.1		
SMBFJ18A	15.3	17.1	18.9	1	1	25.2	24.2		
SMBFJ20A	17.1	19	21	1	1	27.7	22.0		
SMBFJ22A	18.8	20.9	23.1	1	1	30.6	19.9		
SMBFJ24A	20.5	22.8	25.2	1	1	33.2	18.4		
SMBFJ27A	23.1	25.7	28.4	1	1	37.5	16.3		
SMBFJ30A	25.6	28.5	31.5	1	1	41.4	14.7		
SMBFJ33A	28.2	31.4	34.7	1	1	45.7	13.3		
SMBFJ36A	30.8	34.2	37.8	1	1	49.9	12.2		
SMBFJ39A	33.3	37.1	41	1	1	53.9	11.3		
SMBFJ43A	36.8	40.9	45.2	1	1	59.3	10.3		
SMBFJ47A	40.2	44.7	49.4	1	1	64.8	9.4		
SMBFJ51A	43.6	48.5	53.6	1	1	70.1	8.7		
SMBFJ56A	47.8	53.2	58.8	1	1	77	7.9		
SMBFJ62A	53	58.9	65.1	1	1	85	7.2		
SMBFJ68A	58.1	64.6	71.4	1	1	92	6.6		
SMBFJ75A	64.1	71.3	78.8	1	1	103	5.9		
SMBFJ82A	70.1	77.9	86.1	1	1	113	5.4		
SMBFJ91A	77.8	86.5	95.5	1	1	125	4.9		
SMBFJ100A	85.5	95	105	1	1	137	4.5		
SMBFJ110A	94	105	116	1	1	152	4.0		
SMBFJ120A	102	114	126	1	1	165	3.7		
SMBFJ130A	111	124	137	1	1	179	3.4		
SMBFJ150A	128	143	158	1	1	207	2.9		
SMBFJ160A	136	152	168	1	1	219	2.8		
SMBFJ170A	145	162	179	1	1	234	2.6		
SMBFJ180A	154	171	189	1	1	246	2.5		
SMBFJ200A	171	190	210	1	1	274	2.2		
SMBFJ220A	185	209	231	1	1	328	1.9		
SMBFJ250A	214	237	263	1	1	344	1.8		
SMBFJ300A	256	285	315	1	1	414	1.5		
SMBFJ350A	300	332	368	1	1	482	1.3		
SMBFJ400A	342	380	420	1	1	548	1.1		
SMBFJ440A	376	418	462	1	1	602	1.0		
SMBFJ480A	408	456	504	1	1	658	0.9		
SMBFJ510A	434	485	535	1	1	698	0.9		
SMBFJ530A	450	503.5	556.5	1	1	725	0.8		
SMBFJ540A	459	513	567	1	1	740	0.8		
SMBFJ550A	467	522.5	577.5	1	1	760	0.8		

NOTE: 1. Suffix "A" indicates ±5% Tolerance.

T.V.S.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">                     Package Outline Drawing No. Please refer to Page: 131~139                 </div>
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>		V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.		UNI-	BI-			
	V	V	V	mA	µA	µA	V	A	

### 600 Watts

SMBJ5.0	5.0	6.40	7.55	10	800	1600	9.6	62.5
SMBJ5.0A	5.0	6.40	7.25	10	800	1600	9.2	65.2
SMBJ6.0	6.0	6.67	8.45	10	800	1600	11.4	52.6
SMBJ6.0A	6.0	6.67	7.67	10	800	1600	10.3	58.3
SMBJ6.5	6.5	7.22	9.14	10	500	1000	12.3	48.7
SMBJ6.5A	6.5	7.22	8.30	10	500	1000	11.2	53.6
SMBJ7.0	7.0	7.78	9.86	10	200	400	13.3	45.1
SMBJ7.0A	7.0	7.78	8.95	10	200	400	12.0	50.0
SMBJ7.5	7.5	8.33	10.67	1	100	200	14.3	42.0
SMBJ7.5A	7.5	8.33	9.58	1	100	200	12.9	46.5
SMBJ8.0	8.0	8.89	11.30	1	50	100	15.0	40.0
SMBJ8.0A	8.0	8.89	10.23	1	50	100	13.6	44.1
SMBJ8.5	8.5	9.44	11.92	1	10	20	15.9	37.7
SMBJ8.5A	8.5	9.44	10.82	1	10	20	14.4	41.7
SMBJ9.0	9.0	10.0	12.6	1	5	10	16.9	35.5
SMBJ9.0A	9.0	10.0	11.5	1	5	10	15.4	39.0
SMBJ10	10	11.1	14.1	1	5		18.8	31.9
SMBJ10A	10	11.1	12.8	1	5		17.0	35.3
SMBJ11	11	12.2	15.4	1	5		20.1	29.9
SMBJ11A	11	12.2	14.0	1	5		18.2	33.0
SMBJ12	12	13.3	16.9	1	5		22.0	27.3
SMBJ12A	12	13.3	15.3	1	5		19.9	30.2
SMBJ13	13	14.4	18.2	1	5		23.8	25.2
SMBJ13A	13	14.4	16.5	1	5		21.5	27.9
SMBJ14	14	15.6	19.8	1	5		25.8	23.3
SMBJ14A	14	15.6	17.9	1	5		23.2	25.8
SMBJ15	15	16.7	21.1	1	5		26.9	22.3
SMBJ15A	15	16.7	19.2	1	5		24.4	24.0
SMBJ16	16	17.8	22.6	1	5		28.8	20.8
SMBJ16A	16	17.8	20.5	1	5		26.0	23.1
SMBJ17	17	18.9	23.9	1	5		30.5	19.7
SMBJ17A	17	18.9	21.7	1	5		27.6	21.7
SMBJ18	18	20.0	25.3	1	5		32.2	18.6
SMBJ18A	18	20.0	23.3	1	5		29.2	20.5
SMBJ20	20	22.2	28.1	1	5		35.8	16.7
SMBJ20A	20	22.2	25.5	1	5		32.4	18.5
SMBJ22	22	24.4	30.9	1	5		39.4	15.2
SMBJ22A	22	24.4	28.0	1	5		35.5	16.9
SMBJ24	24	26.7	33.8	1	5		43.0	14.0
SMBJ24A	24	26.7	30.7	1	5		38.9	15.4
SMBJ26	26	28.9	36.6	1	5		46.6	12.4
SMBJ26A	26	28.9	33.2	1	5		42.1	14.2
SMBJ28	28	31.1	39.4	1	5		50.0	12.0
SMBJ28A	28	31.1	35.8	1	5		45.4	13.2
SMBJ30	30	33.3	42.2	1	5		53.5	11.2
SMBJ30A	30	33.3	38.3	1	5		48.4	12.4
SMBJ33	33	36.7	46.5	1	5		59.0	10.2
SMBJ33A	33	36.7	42.2	1	5		53.3	11.3
SMBJ36	36	40.0	50.7	1	5		64.3	9.3
SMBJ36A	36	40.0	46.0	1	5		58.1	10.3
SMBJ40	40	44.4	56.3	1	5		71.4	8.4
SMBJ40A	40	44.4	51.1	1	5		64.5	9.3
SMBJ43	43	47.8	60.5	1	5		76.7	7.8
SMBJ43A	43	47.8	54.9	1	5		69.4	8.6

SMB  
(DO-214AA)  
(No.: 29)



NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMBJ5.0C, SMBJ5.0CA, SMBJ43C, SMBJ43CA,...etc.), electrical characteristics apply in both directions.



# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">                     Package Outline Drawing No. Please refer to Page: 131~139                 </div>
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$		$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.		UNI-	BI-			
V	V	V	V	mA	$\mu A$	$\mu A$	V	A	

## 600 Watts

SMBJ45	45	50.0	63.3	1	5	80.3	7.5
SMBJ45A	45	50.0	57.5	1	5	72.7	8.3
SMBJ48	48	53.3	67.5	1	5	85.5	7.0
SMBJ48A	48	53.3	61.3	1	5	77.4	7.7
SMBJ51	51	56.7	71.8	1	5	91.1	6.6
SMBJ51A	51	56.7	65.2	1	5	82.4	7.3
SMBJ54	54	60.0	76.0	1	5	96.3	6.2
SMBJ54A	54	60.0	69.0	1	5	87.1	6.9
SMBJ58	58	64.4	81.6	1	5	103.0	5.8
SMBJ58A	58	64.4	74.1	1	5	93.6	6.4
SMBJ60	60	66.7	84.5	1	5	107.0	5.6
SMBJ60A	60	66.7	76.7	1	5	96.8	6.2
SMBJ64	64	71.1	90.1	1	5	114	5.3
SMBJ64A	64	71.1	81.8	1	5	103	5.8
SMBJ70	70	77.8	98.6	1	5	125	4.8
SMBJ70A	70	77.8	89.5	1	5	113	5.3
SMBJ75	75	83.3	105.7	1	5	134	4.5
SMBJ75A	75	83.3	95.8	1	5	121	4.9
SMBJ78	78	86.7	109.8	1	5	139	4.3
SMBJ78A	78	86.7	99.7	1	5	126	4.7
SMBJ85	85	94.4	119.2	1	5	151	3.9
SMBJ85A	85	94.4	108.2	1	5	137	4.4
SMBJ90	90	100	126.5	1	5	160	3.8
SMBJ90A	90	100	115.5	1	5	146	4.1
SMBJ100	100	111	141.0	1	5	179	3.4
SMBJ100A	100	111	128.0	1	5	162	3.7
SMBJ110	110	122	154.5	1	5	196	3.0
SMBJ110A	110	122	140.5	1	5	177	3.4
SMBJ120	120	133	169.0	1	5	214	2.8
SMBJ120A	120	133	153.0	1	5	193	3.1
SMBJ130	130	144	182.5	1	5	231	2.6
SMBJ130A	130	144	165.5	1	5	209	2.9
SMBJ150	150	167	211.5	1	5	268	2.2
SMBJ150A	150	167	192.5	1	5	243	2.5
SMBJ160	160	178	226.0	1	5	287	2.1
SMBJ160A	160	178	205.0	1	5	259	2.3
SMBJ170	170	189	239.5	1	5	304	2.0
SMBJ170A	170	189	217.5	1	5	275	2.2
SMBJ180	180	198	253.8	1	5	322	1.9
SMBJ180A	180	198	230.4	1	5	292	2.1
SMBJ190	190	209	267.9	1	5	340	1.8
SMBJ190A	190	209	243.2	1	5	308	2.0
SMBJ200	200	220	282.0	1	5	358	1.7
SMBJ200A	200	220	256.0	1	5	324	1.9
SMBJ210	210	231	296.1	1	5	376	1.6
SMBJ210A	210	231	268.8	1	5	340	1.8
SMBJ220	220	242	310.2	1	5	394	1.5
SMBJ220A	220	242	281.6	1	5	356	1.7

SMB  
(DO-214AA)  
(No.: 29)



NOTE: 1. Suffix "A" indicates  $\pm 5\%$  Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMBJ45C, SMBJ45CA, SMBJ220C, SMBJ220CA,....etc.), electrical characteristics apply in both directions.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	<div style="border: 1px solid black; padding: 5px; width: fit-content; margin: auto;">                     Package Outline Drawing No. Please refer to Page: 131~139                 </div>
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>		V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.		UNI-	BI-			
	V	V	V	mA	µA	µA	V	A	

## 1500 Watts

SMCJ5.0	5.0	6.40	7.55	10	1000	2000	9.6	156.2
SMCJ5.0A	5.0	6.40	7.25	10	1000	2000	9.2	163.0
SMCJ6.0	6.0	6.67	8.45	10	1000	2000	11.4	131.6
SMCJ6.0A	6.0	6.67	7.67	10	1000	2000	10.3	145.6
SMCJ6.5	6.5	7.22	9.14	10	500	1000	12.3	122.0
SMCJ6.5A	6.5	7.22	8.30	10	500	1000	11.2	133.9
SMCJ7.0	7.0	7.78	9.86	10	200	400	13.3	112.8
SMCJ7.0A	7.0	7.78	8.95	10	200	400	12.0	125.0
SMCJ7.5	7.5	8.33	10.67	1	100	200	14.3	104.9
SMCJ7.5A	7.5	8.33	9.58	1	100	200	12.9	116.3
SMCJ8.0	8.0	8.89	11.30	1	50	100	15.0	100.0
SMCJ8.0A	8.0	8.89	10.23	1	50	100	13.6	110.3
SMCJ8.5	8.5	9.44	11.92	1	25	50	15.9	94.3
SMCJ8.5A	8.5	9.44	10.82	1	25	50	14.4	104.2
SMCJ9.0	9.0	10.0	12.6	1	10	20	16.9	88.7
SMCJ9.0A	9.0	10.0	11.5	1	10	20	15.4	97.4
SMCJ10	10	11.1	14.1	1	5		18.8	79.8
SMCJ10A	10	11.1	12.8	1	5		17.0	88.2
SMCJ11	11	12.2	15.4	1	5		20.1	74.6
SMCJ11A	11	12.2	14.0	1	5		18.2	82.4
SMCJ12	12	13.3	16.9	1	5		22.0	68.2
SMCJ12A	12	13.3	15.3	1	5		19.9	75.3
SMCJ13	13	14.4	18.2	1	5		23.8	63.0
SMCJ13A	13	14.4	16.5	1	5		21.5	69.7
SMCJ14	14	15.6	19.8	1	5		25.8	58.1
SMCJ14A	14	15.6	17.9	1	5		23.2	64.7
SMCJ15	15	16.7	21.1	1	5		26.9	55.8
SMCJ15A	15	16.7	19.2	1	5		24.4	61.5
SMCJ16	16	17.8	22.6	1	5		28.8	52.1
SMCJ16A	16	17.8	20.5	1	5		26.0	57.7
SMCJ17	17	18.9	23.9	1	5		30.5	49.2
SMCJ17A	17	18.9	21.7	1	5		27.6	53.3
SMCJ18	18	20.0	25.3	1	5		32.2	46.6
SMCJ18A	18	20.0	23.3	1	5		29.2	51.4
SMCJ20	20	22.2	28.1	1	5		35.8	41.9
SMCJ20A	20	22.2	25.5	1	5		32.4	46.3
SMCJ22	22	24.4	30.9	1	5		39.4	38.1
SMCJ22A	22	24.4	28.0	1	5		35.5	42.2
SMCJ24	24	26.7	33.8	1	5		43.0	34.9
SMCJ24A	24	26.7	30.7	1	5		38.9	38.6
SMCJ26	26	28.9	36.6	1	5		46.6	32.2
SMCJ26A	26	28.9	33.2	1	5		42.1	35.6
SMCJ28	28	31.1	39.4	1	5		50.0	30.0
SMCJ28A	28	31.1	35.8	1	5		45.4	33.0
SMCJ30	30	33.3	42.2	1	5		53.5	28.0
SMCJ30A	30	33.3	38.3	1	5		48.4	31.0
SMCJ33	33	36.7	46.5	1	5		59.0	25.2
SMCJ33A	33	36.7	42.2	1	5		53.3	28.1
SMCJ36	36	40.0	50.7	1	5		64.3	23.3
SMCJ36A	36	40.0	46.0	1	5		58.1	25.8
SMCJ40	40	44.4	56.3	1	5		71.4	21.0
SMCJ40A	40	44.4	51.1	1	5		64.5	23.2
SMCJ43	43	47.8	60.5	1	5		76.7	19.6
SMCJ43A	43	47.8	54.9	1	5		69.4	21.6

SMC  
(DO-214AB)  
(No.: 30)



NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMCJ5.0C, SMCJ5.0CA, SMCJ43C, SMCJ43CA...etc.), electrical characteristics apply in both directions.



# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$		$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.		UNI-	BI-			
	V	V	V	mA	$\mu A$	$\mu A$	V	A	

## 1500 Watts

SMCJ45	45	50.0	63.3	1	5	80.3	18.7
SMCJ45A	45	50.0	57.5	1	5	72.7	20.6
SMCJ48	48	53.3	67.5	1	5	85.5	17.5
SMCJ48A	48	53.3	61.3	1	5	77.4	19.4
SMCJ51	51	56.7	71.8	1	5	91.1	18.5
SMCJ51A	51	56.7	65.2	1	5	82.4	18.2
SMCJ54	54	60.0	76.0	1	5	96.3	15.6
SMCJ54A	54	60.0	69.0	1	5	87.1	17.2
SMCJ58	58	64.4	81.6	1	5	103	14.6
SMCJ58A	58	64.4	74.1	1	5	93.6	16.0
SMCJ60	60	66.7	84.5	1	5	107	14.0
SMCJ60A	60	66.7	76.7	1	5	96.8	15.5
SMCJ64	64	71.1	90.1	1	5	114	13.2
SMCJ64A	64	71.1	81.8	1	5	103	14.6
SMCJ70	70	77.8	98.6	1	5	125	12.0
SMCJ70A	70	77.8	89.5	1	5	113	13.3
SMCJ75	75	83.3	105.7	1	5	134	11.2
SMCJ75A	75	83.3	95.8	1	5	121	12.4
SMCJ78	78	86.7	109.8	1	5	139	10.8
SMCJ78A	78	86.7	99.7	1	5	126	11.4
SMCJ85	85	94.4	119.2	1	5	151	9.9
SMCJ85A	85	94.4	108.2	1	5	137	10.4
SMCJ90	90	100	126.5	1	5	160	9.4
SMCJ90A	90	100	115.5	1	5	146	10.3
SMCJ100	100	111	141.0	1	5	179	8.4
SMCJ100A	100	111	128.0	1	5	162	9.3
SMCJ110	110	122	154.5	1	5	196	7.7
SMCJ110A	110	122	140.5	1	5	177	8.4
SMCJ120	120	133	169.0	1	5	214	7.0
SMCJ120A	120	133	153.0	1	5	193	7.9
SMCJ130	130	144	182.5	1	5	231	6.5
SMCJ130A	130	144	165.5	1	5	209	7.2
SMCJ150	150	167	211.5	1	5	268	5.6
SMCJ150A	150	167	192.5	1	5	243	6.2
SMCJ160	160	178	226.0	1	5	287	5.2
SMCJ160A	160	178	205.0	1	5	259	5.8
SMCJ170	170	189	239.5	1	5	304	4.9
SMCJ170A	170	189	217.5	1	5	275	5.5
SMCJ180	180	198	253.8	1	5	322	4.7
SMCJ180A	180	198	230.4	1	5	292	5.1
SMCJ190	190	209	267.9	1	5	340	4.4
SMCJ190A	190	209	243.2	1	5	308	4.8
SMCJ200	200	220	282.0	1	5	358	4.1
SMCJ200A	200	220	256.0	1	5	324	4.6
SMCJ210	210	231	296.1	1	5	376	4.0
SMCJ210A	210	231	268.8	1	5	340	4.4
SMCJ220	220	242	310.2	1	5	394	3.8
SMCJ220A	220	242	281.6	1	5	356	4.2

SMC  
(DO-214AB)  
(No.: 30)



NOTE: 1. Suffix "A" indicates  $\pm 5\%$  Tolerance.

2. For Bidirectional use "C" or "CA" Suffix for types. (e.g.: SMCJ45C, SMCJ45CA, SMCJ220C, SMCJ220CA, etc.), electrical characteristics apply in both directions.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	Package Outline Drawing No. Please refer to Page: 131~139
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>		V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.		UNI-	BI-			
	V	V	V	mA	μA	μA	V	A	

### 3000 Watts

SMDJ5.0	5.0	6.40	7.30	10	1000	2000	9.6	312.50
SMDJ5.0A	5.0	6.40	7.00	10	1000	2000	9.2	326.09
SMDJ6.0	6.0	6.67	8.15	10	1000	2000	11.4	263.16
SMDJ6.0A	6.0	6.67	7.37	10	1000	2000	10.3	291.26
SMDJ6.5	6.5	7.22	8.82	10	500	1000	12.3	243.90
SMDJ6.5A	6.5	7.22	7.98	10	500	1000	11.2	267.86
SMDJ7.0	7.0	7.78	9.51	10	200	400	13.3	225.56
SMDJ7.0A	7.0	7.78	8.60	10	200	400	12.0	250.00
SMDJ7.5	7.5	8.33	10.20	1	100	200	14.3	209.79
SMDJ7.5A	7.5	8.33	9.21	1	100	200	12.9	232.56
SMDJ8.0	8.0	8.89	10.90	1	50	100	15.0	200.00
SMDJ8.0A	8.0	8.89	9.83	1	50	100	13.6	220.59
SMDJ8.5	8.5	9.44	11.50	1	25	50	15.9	188.68
SMDJ8.5A	8.5	9.44	10.40	1	25	50	14.4	208.33
SMDJ9.0	9.0	10.00	12.20	1	10	20	16.9	177.51
SMDJ9.0A	9.0	10.00	11.10	1	10	20	15.4	194.81
SMDJ10	10	11.10	13.60	1	5		18.8	159.57
SMDJ10A	10	11.10	12.30	1	5		17.0	176.47
SMDJ11	11	12.20	14.90	1	5		20.1	149.25
SMDJ11A	11	12.20	13.50	1	5		18.2	164.84
SMDJ12	12	13.30	16.30	1	5		22.0	136.36
SMDJ12A	12	13.30	14.70	1	5		19.9	150.75
SMDJ13	13	14.40	17.60	1	5		23.8	126.05
SMDJ13A	13	14.40	15.90	1	5		21.5	139.53
SMDJ14	14	15.60	19.10	1	5		25.8	116.28
SMDJ14A	14	15.60	17.20	1	5		23.2	129.31
SMDJ15	15	16.70	20.40	1	5		26.9	111.52
SMDJ15A	15	16.70	18.50	1	5		24.4	122.95
SMDJ16	16	17.80	21.80	1	5		28.8	104.17
SMDJ16A	16	17.80	19.70	1	5		26.0	115.38
SMDJ17	17	18.90	23.10	1	5		30.5	98.36
SMDJ17A	17	18.90	20.90	1	5		27.6	108.70
SMDJ18	18	20.00	24.40	1	5		32.2	93.17
SMDJ18A	18	20.00	22.10	1	5		29.2	102.74
SMDJ19	19	21.13	25.76	1	5		34.0	88.21
SMDJ19A	19	21.13	23.30	1	5		30.8	97.47
SMDJ20	20	22.20	27.10	1	5		35.8	83.80
SMDJ20A	20	22.20	24.50	1	5		32.4	92.59
SMDJ22	22	24.40	29.80	1	5		39.4	76.14
SMDJ22A	22	24.40	26.90	1	5		35.5	84.51
SMDJ24	24	26.70	32.60	1	5		43.0	69.77
SMDJ24A	24	26.70	29.50	1	5		38.9	77.12
SMDJ26	26	28.90	35.30	1	5		46.6	64.38
SMDJ26A	26	28.90	31.90	1	5		42.1	71.26
SMDJ28	28	31.10	38.00	1	5		50.0	60.00
SMDJ28A	28	31.10	34.40	1	5		45.4	66.08
SMDJ30	30	33.30	40.70	1	5		53.5	56.07
SMDJ30A	30	33.30	36.80	1	5		48.4	61.98
SMDJ33	33	36.70	44.90	1	5		59.0	50.85
SMDJ33A	33	36.70	40.60	1	5		53.3	56.29
SMDJ36	36	40.00	48.90	1	5		64.3	46.66
SMDJ36A	36	40.00	44.20	1	5		58.1	51.64
SMDJ40	40	44.40	54.30	1	5		71.4	42.02
SMDJ40A	40	44.40	49.10	1	5		64.5	46.51

SMC  
(DO-214AB)  
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NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" of "CA" Suffix for types. (e.g.: SMDJ5.0C, SMDJ5.0CA, SMDJ40C, SMDJ40CA,...etc.), electrical characteristics apply in both directions.

# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current		Max. Clamping Voltage	Max. Peak Pulse Current	Package Outline Drawing No. Please refer to Page: 131~139
	$V_{RWM}$	$V_{BR} @ I_T$		$I_T$	$I_R @ V_{RWM}$		$V_C @ I_{PP}$	$I_{PP}$	
		Min.	Max.		UNI- $\mu A$	BI- $\mu A$			
V	V	V	mA	$\mu A$	$\mu A$	V	A		

## 3000 Watts

SMDJ43	43	47.8	58.4	1	5	76.7	39.11
SMDJ43A	43	47.8	52.8	1	5	69.4	43.23
SMDJ45	45	50.0	61.1	1	5	80.3	37.36
SMDJ45A	45	50.0	55.3	1	5	72.7	41.27
SMDJ48	48	53.3	65.1	1	5	85.5	35.09
SMDJ48A	48	53.3	58.9	1	5	77.4	38.76
SMDJ51	51	56.7	69.3	1	5	91.1	32.93
SMDJ51A	51	56.7	62.7	1	5	82.4	36.41
SMDJ54	54	60.0	73.3	1	5	96.3	31.15
SMDJ54A	54	60.0	66.3	1	5	87.1	34.44
SMDJ58	58	64.4	78.7	1	5	103.0	29.13
SMDJ58A	58	64.4	71.2	1	5	93.6	32.05
SMDJ60	60	66.7	81.5	1	5	107.0	28.04
SMDJ60A	60	66.7	73.7	1	5	96.8	30.99
SMDJ64	64	71.1	86.9	1	5	114.0	26.32
SMDJ64A	64	71.1	78.6	1	5	103.0	29.13
SMDJ70	70	77.8	95.1	1	5	125.0	24.00
SMDJ70A	70	77.8	86.0	1	5	113.0	26.55
SMDJ75	75	83.3	102.0	1	5	134.0	22.39
SMDJ75A	75	83.3	92.1	1	5	121.0	24.79
SMDJ78	78	86.7	106.0	1	5	139.0	21.58
SMDJ78A	78	86.7	95.8	1	5	126.0	23.81
SMDJ80	80	88.8	108.8	1	5	143.2	20.95
SMDJ80A	80	88.8	97.6	1	5	129.6	23.15
SMDJ85	85	94.4	115.0	1	5	151.0	19.87
SMDJ85A	85	94.4	104.0	1	5	137.0	21.90
SMDJ90	90	100	122.0	1	5	160.0	18.75
SMDJ90A	90	100	111.0	1	5	146.0	20.55
SMDJ100	100	111	136.0	1	5	179.0	16.76
SMDJ100A	100	111	123.0	1	5	162.0	18.52
SMDJ110	110	122	149.0	1	5	196.0	15.31
SMDJ110A	110	122	135.0	1	5	177.0	16.95
SMDJ120	120	133	163.0	1	5	214.0	14.02
SMDJ120A	120	133	147.0	1	5	193.0	15.54
SMDJ130	130	144	176.0	1	5	231.0	12.99
SMDJ130A	130	144	159.0	1	5	209.0	14.35
SMDJ140	140	155	190.4	1	5	250.6	11.97
SMDJ140A	140	155	171.0	1	5	226.8	13.23
SMDJ150	150	167	204.0	1	5	268.0	11.19
SMDJ150A	150	167	185.0	1	5	243.0	12.35
SMDJ160	160	178	218.0	1	5	287.0	10.45
SMDJ160A	160	178	197.0	1	5	259.0	11.58
SMDJ170	170	189	231.0	1	5	304.0	9.87
SMDJ170A	170	189	209.0	1	5	275.0	10.91
SMDJ180	180	200	244.8	1	5	322.2	9.31
SMDJ180A	180	200	220.0	1	5	291.6	10.29
SMDJ190	190	211	258.4	1	5	340.1	8.82
SMDJ190A	190	211	232.0	1	5	307.8	9.75
SMDJ200A	200	224	247.0	1	5	324.0	9.26
SMDJ220A	220	246	272.0	1	5	356.0	8.43
SMDJ250A	250	279	309.0	1	5	405.0	7.41
SMDJ300A	300	335	371.0	1	5	486.0	6.17
SMDJ350A	350	391	432.0	1	5	567.0	5.29
SMDJ400A	400	447	494.0	1	5	648.0	4.63
SMDJ440A	440	492	543.0	1	5	713.0	4.21

SMC  
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T.V.S.

NOTE: 1. Suffix "A" indicates  $\pm 5\%$  Tolerance.  
 2. For Bidirectional use "C" of "CA" Suffix for types. (e.g.: SMDJ43C, SMDJ43CA, SMDJ440C, SMDJ440CA, etc.), electrical characteristics apply in both directions.

TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current	Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>	V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.					
	V	V	V	mA	µA	V	A	

### 5000 Watts

5.0SMDJ11	11	12.2	14.9	1	800	20.1	251.24
5.0SMDJ11A	11	12.2	13.5	1	800	18.2	277.47
5.0SMDJ12	12	13.3	16.3	1	800	22.0	229.55
5.0SMDJ12A	12	13.3	14.7	1	800	19.9	253.77
5.0SMDJ13	13	14.4	17.6	1	500	23.8	212.18
5.0SMDJ13A	13	14.4	15.9	1	500	21.5	234.88
5.0SMDJ14	14	15.6	19.1	1	200	25.8	195.74
5.0SMDJ14A	14	15.6	17.2	1	200	23.2	217.67
5.0SMDJ15	15	16.7	20.4	1	100	26.9	187.73
5.0SMDJ15A	15	16.7	18.5	1	100	24.4	206.97
5.0SMDJ16	16	17.8	21.8	1	50	28.8	175.35
5.0SMDJ16A	16	17.8	19.7	1	50	26.0	194.23
5.0SMDJ17	17	18.9	23.1	1	20	30.5	165.57
5.0SMDJ17A	17	18.9	20.9	1	20	27.6	182.97
5.0SMDJ18	18	20.0	24.4	1	10	32.2	156.83
5.0SMDJ18A	18	20.0	22.1	1	10	29.2	172.95
5.0SMDJ19	19	21.13	25.76	1	10	34.0	148.49
5.0SMDJ19A	19	21.13	23.3	1	10	30.8	164.07
5.0SMDJ20	20	22.2	27.1	1	5	35.8	141.06
5.0SMDJ20A	20	22.2	24.5	1	5	32.4	155.86
5.0SMDJ22	22	24.4	29.8	1	5	39.4	128.17
5.0SMDJ22A	22	24.4	26.9	1	5	35.5	142.25
5.0SMDJ24	24	26.7	32.6	1	5	43.0	117.44
5.0SMDJ24A	24	26.7	29.5	1	5	38.9	129.82
5.0SMDJ26	26	28.9	35.3	1	5	46.6	108.37
5.0SMDJ26A	26	28.9	31.9	1	5	42.1	119.95
5.0SMDJ28	28	31.1	38.0	1	5	50.0	101.00
5.0SMDJ28A	28	31.1	34.4	1	5	45.4	111.23
5.0SMDJ30	30	33.3	40.7	1	5	53.5	94.39
5.0SMDJ30A	30	33.3	36.8	1	5	48.4	104.34
5.0SMDJ33	33	36.7	44.9	1	5	59.0	85.59
5.0SMDJ33A	33	36.7	40.6	1	5	53.3	94.75
5.0SMDJ36	36	40.0	48.9	1	5	64.3	78.54
5.0SMDJ36A	36	40.0	44.2	1	5	58.1	86.92
5.0SMDJ40	40	44.4	54.3	1	5	71.4	70.73
5.0SMDJ40A	40	44.4	49.1	1	5	64.5	78.29
5.0SMDJ43	43	47.8	58.4	1	5	76.7	65.84
5.0SMDJ43A	43	47.8	52.8	1	5	69.4	72.77
5.0SMDJ45	45	50.0	61.1	1	5	80.3	62.89
5.0SMDJ45A	45	50.0	55.3	1	5	72.7	69.46
5.0SMDJ48	48	53.3	65.1	1	5	85.5	59.06
5.0SMDJ48A	48	53.3	58.9	1	5	77.4	65.25
5.0SMDJ51	51	56.7	69.3	1	5	91.1	55.43
5.0SMDJ51A	51	56.7	62.7	1	5	82.4	61.29
5.0SMDJ54	54	60.0	73.3	1	5	96.3	52.44
5.0SMDJ54A	54	60.0	66.3	1	5	87.1	57.98
5.0SMDJ58	58	64.4	78.7	1	5	103.0	49.03
5.0SMDJ58A	58	64.4	71.2	1	5	93.6	53.95
5.0SMDJ60	60	66.7	81.5	1	5	107.0	47.20
5.0SMDJ60A	60	66.7	73.7	1	5	96.8	52.17
5.0SMDJ64	64	71.1	86.9	1	5	114.0	44.30
5.0SMDJ64A	64	71.1	78.6	1	5	103.0	49.03

SMC  
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NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" of "CA" Suffix for types. (e.g.: 5.0SMDJ11C, 5.0SMDJ11CA, 5.0SMDJ64C, 5.0SMDJ64CA,...etc.), electrical characteristics apply in both directions.

# TRANSIENT VOLTAGE SUPPRESSORS (SMD Type)



TYPE No.	Reverse Stand-off Voltage	Breakdown Voltage		Test Current	Max. Reverse Leakage Current	Max. Clamping Voltage	Max. Peak Pulse Current	[ Package Outline Drawing No. Please refer to Page: 131~139 ]
	V <sub>RWM</sub>	V <sub>BR</sub> @ I <sub>T</sub>		I <sub>T</sub>	I <sub>R</sub> @ V <sub>RWM</sub>	V <sub>C</sub> @ I <sub>PP</sub>	I <sub>PP</sub>	
		Min.	Max.					
	V	V	V	mA	μA	V	A	

## 5000 Watts

5.0SMDJ70	70	77.8	95.1	1	5	125.0	40.40	SMC (DO-214AB) (No.: 30)	
5.0SMDJ70A	70	77.8	86	1	5	113.0	44.69		
5.0SMDJ75	75	83.3	102	1	5	134.0	37.69		
5.0SMDJ75A	75	83.3	92.1	1	5	121.0	41.74		
5.0SMDJ78	78	86.7	106	1	5	139.0	36.33		
5.0SMDJ78A	78	86.7	95.8	1	5	126.0	40.08		
5.0SMDJ80	80	88.8	108.8	1	5	143.2	35.27		
5.0SMDJ80A	80	88.8	97.6	1	5	129.6	38.97		
5.0SMDJ85	85	94.4	115	1	5	151.0	33.44		
5.0SMDJ85A	85	94.4	104	1	5	137.0	36.86		
5.0SMDJ90	90	100	122	1	5	160.0	31.56		
5.0SMDJ90A	90	100	111	1	5	146.0	34.59		
5.0SMDJ100	100	111	136	1	5	179.0	28.21		
5.0SMDJ100A	100	111	123	1	5	162.0	31.17		
5.0SMDJ110	110	122	149	1	5	196.0	25.77		
5.0SMDJ110A	110	122	135	1	5	177.0	28.53		
5.0SMDJ120	120	133	163	1	5	214.0	23.60		
5.0SMDJ120A	120	133	147	1	5	193.0	26.17		
5.0SMDJ130	130	144	176	1	5	231.0	21.86		
5.0SMDJ130A	130	144	159	1	5	209.0	24.16		
5.0SMDJ140	140	155	190.4	1	5	250.6	20.15		
5.0SMDJ140A	140	155	171	1	5	226.8	22.27		
5.0SMDJ150	150	167	204	1	5	268.0	18.84		
5.0SMDJ150A	150	167	185	1	5	243.0	20.78		
5.0SMDJ160	160	178	218	1	5	287.0	17.60		
5.0SMDJ160A	160	178	197	1	5	259.0	19.50		
5.0SMDJ170	170	189	231	1	5	304.0	16.61		
5.0SMDJ170A	170	189	209	1	5	275.0	18.36		
5.0SMDJ180	180	200	244.8	1	5	322.2	15.67		
5.0SMDJ180A	180	200	220	1	5	291.6	17.32		
5.0SMDJ190	190	211	258.4	1	5	340.1	14.85		
5.0SMDJ190A	190	211	232	1	5	307.8	16.41		
5.0SMDJ200A	200	224	247	1	5	324.0	9.26		
5.0SMDJ220A	220	246	272	1	5	356.0	8.43		
5.0SMDJ250A	250	279	309	1	5	405.0	7.41		
5.0SMDJ300A	300	335	371	1	5	486.0	6.17		
5.0SMDJ350A	350	391	432	1	5	567.0	5.29		
5.0SMDJ400A	400	447	494	1	5	648.0	4.63		
5.0SMDJ440A	440	492	543	1	5	713.0	4.21		

NOTE: 1. Suffix "A" indicates ±5% Tolerance.

2. For Bidirectional use "C" of "CA" Suffix for types. (e.g.: 5.0SMDJ70C, 5.0SMDJ70CA, 5.0SMDJ190C, 5.0SMDJ190CA,...etc.), electrical characteristics apply in both directions.