

FEATURES

- Available as "HR" (high reliability) screened per MIL-PRF-19500, JANTX level. Add "HR" suffix to base part number.
- Available as non-RoHS (Sn/Pb plating), standard, and as RoHS by adding "-PBF" suffix.

MAXIMUM RATINGS

Ratings	Value
Operating and storage temperature	-55° - +150°C
Peak pulse power at 10/1000 μ s	1500 watts
Thermal resistance	$R_{\theta JL} = 20^{\circ}\text{C}/\text{W}$
Impulse repetition rate (duty factor)	0.01%
Steady-state maximum power @ $T_L = 25^{\circ}\text{C}$	5.0 watt
T_{clamping} (0V to $V_{(BR)}$ min)	Less than 5 ns

ELECTRICAL CHARACTERISTICS ($T_A = 25^{\circ}\text{C}$ unless otherwise specified)

Part number	Rated stand-off voltage ⁽¹⁾	Breakdown voltage*			Maximum clamping voltage @ I_{pp} (10/1000 μ s)	Maximum standby current @ V_{WM}	Maximum peak pulse current	Maximum temperature coefficient of $V_{(BR)}$
	V_{WM}	$V_{(BR)}$		@ $I_{(BR)}$	V_C	I_D	I_{pp}	$\alpha V_{(BR)}$
	Volts	Volts		mA	Volts	μ A	A	%/°C
		Min	Max					
SMCJ6036	5.5	6.75	8.25	10	11.7	1000	128	0.061
SMCJ6036A	6.0	7.13	7.88	10	11.3	1000	132	0.061
SMCJ6037	6.5	7.38	9.02	10	12.5	500	120	0.065
SMCJ6037A	7.0	7.79	8.61	10	12.1	500	124	0.065
SMCJ6038	7.0	8.19	10.00	10	13.8	200	109	0.068
SMCJ6038A	7.5	8.65	9.55	10	13.4	200	112	0.068
SMCJ6039	8.0	9.0	11.0	1	15.0	50	100	0.073
SMCJ6039A	8.5	9.5	10.5	1	14.5	50	103	0.073
SMCJ6040	8.5	9.9	12.1	1	16.2	10	93	0.075
SMCJ6040A	9.0	10.5	11.6	1	15.6	10	96	0.075
SMCJ6041	9.0	10.8	13.2	1	17.3	5	87	0.078
SMCJ6041A	10.0	11.4	12.6	1	16.7	5	90	0.078
SMCJ6042	10.0	11.7	14.3	1	19.0	5	79	0.081
SMCJ6042A	11.0	12.4	13.7	1	18.2	5	82	0.081
SMCJ6043	11.0	13.5	16.5	1	22.0	5	68	0.084
SMCJ6043A	12.0	14.3	15.8	1	21.2	5	71	0.084
SMCJ6044	12.0	14.4	17.5	1	23.5	5	64	0.086
SMCJ6044A	13.0	15.2	16.8	1	22.5	5	67	0.068
SMCJ6045	14.0	16.2	19.8	1	26.5	5	56.5	0.088
SMCJ6045A	15.0	17.1	18.9	1	25.2	5	59.5	0.088
SMCJ6046	16.0	18.0	22.0	1	29.1	5	51.5	0.090
SMCJ6046A	17.0	19.0	21.0	1	27.7	5	54	0.090

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SMCJ6047	17.0	19.8	24.2	1	31.9	5	47	0.092
SMCJ6047A	18.0	20.9	23.1	1	30.6	5	49	0.092
SMCJ6048	19.0	21.6	26.4	1	34.7	5	43	0.094
SMCJ6048A	20.0	22.8	25.2	1	33.2	5	45	0.094
SMCJ6049	21.0	24.3	29.7	1	39.1	5	38.5	0.095
SMCJ6049A	22.0	25.7	28.4	1	37.5	5	40	0.096
SMCJ6050	24.0	27.0	33.0	1	43.5	5	34.5	0.097
SMCJ6050A	25.0	28.5	31.5	1	41.4	5	36	0.097
SMCJ6051	26.0	29.7	36.3	1	47.7	5	31.5	0.098
SMCJ6051A	28.0	31.4	34.7	1	45.7	5	33	0.098
SMCJ6052	29.0	32.4	39.6	1	52.0	5	29	0.099
SMCJ6052A	30.0	34.2	37.8	1	49.9	5	30	0.099
SMCJ6053	31.0	35.1	42.9	1	56.4	5	26.5	0.100
SMCJ6053A	33.0	37.1	41.0	1	53.9	5	28	0.100
SMCJ6054	34.0	38.7	47.3	1	61.9	5	24	0.101
SMCJ6054A	36.0	40.9	45.2	1	59.3	5	25.3	0.101
SMCJ6055	38.0	42.3	51.7	1	67.8	5	22.2	0.101
SMCJ6055A	40.0	44.7	49.4	1	64.8	5	23.2	0.101
SMCJ6056	41.0	45.9	56.1	1	73.5	5	20.4	0.102
SMCJ6056A	43.0	48.5	53.6	1	70.1	5	21.4	0.102
SMCJ6057	45.0	50.4	61.6	1	80.5	5	18.6	0.103
SMCJ6057A	47.0	53.2	58.8	1	77.0	5	19.5	0.103
SMCŞJ6058	48.0	55.8	68.2	1	89.0	5	16.9	0.104
SMCJ6058A	53.0	58.9	65.1	1	85.0	5	17.7	0.104
SMCJ6059	55.0	61.2	74.8	1	98.0	5	15.3	0.104
SMCJ6059A	58.0	64.6	71.4	1	92.0	5	16.3	0.104
SMCJ6060	60.0	67.5	82.5	1	108.0	5	13.9	0.105
SMCJ6060A	64.0	71.3	78.8	1	103.0	5	14.6	0.105
SMCJ6061	66.0	73.8	90.2	1	118.0	5	12.7	0.105
SMCJ6061A	70.0	77.9	86.1	1	113.0	5	13.3	0.105
SMCJ6062	73.0	81.9	100.0	1	131.0	5	11.4	0.106
SMCJ6062A	75.0	86.5	95.5	1	125.0	5	12.0	0.106
SMCJ6063	81.0	90.0	110.0	1	144.0	5	10.4	0.106
SMCJ6063A	82.0	95.0	105.0	1	137.0	5	11.0	0.106
SMCJ6064	90.0	99.0	121.0	1	158.0	5	9.5	0.107
SMCJ6064A	94.0	105.0	116.0	1	152.0	5	9.9	0.107
SMCJ6065	95.0	108.0	132.0	1	176.0	5	8.5	0.107
SMCJ6065A	100.0	114.0	126.0	1	168.0	5	8.9	0.107
SMCJ6066	105.0	117.0	143.0	1	191.0	5	7.8	0.107
SMCJ6066A	110.0	124.0	137.0	1	182.0	5	8.2	0.107
SMCJ6067	121.0	135.0	165.0	1	223.0	5	6.7	0.108

SMCJ6036-SMCJ6072A

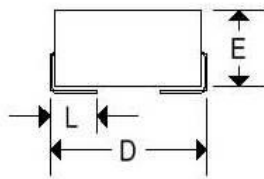
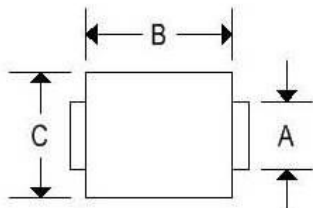
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SMCJ6067A	128.0	143.0	158.0	1	213.0	5	7.0	0.108
SMCJ6068	137.0	153.0	187.0	1	258.0	5	5.8	0.108
SMCJ6068A	145.0	162.0	179.0	1	245.0	5	6.1	0.108
SMCJ6069	145.0	162.0	198.0	1	274.0	5	5.5	0.108
SMCJ6069A	150.0	171.0	189.0	1	261.0	5	5.7	0.108
SMCJ6070	155.0	171.0	210.0	1	292.0	5	5.1	0.108
SMCJ6070A	160.0	181.0	200.0	1	278.0	5	5.4	0.108
SMCJ6071	165.0	180.0	220.0	1	308.0	5	4.9	0.108
SMCJ6071A	170.0	190.0	210.0	1	294.0	5	5.1	0.108
SMCJ6072	175.0	198.0	242.0	1	344.0	5	4.3	0.108
SMCJ6072A	185.0	209.0	231.0	1	328.0	5	4.6	0.108

1. A TVS is normally selected according to the rated Stand-Off voltage V_{WM} which should be equal to or greater than the dc or continuous peak operating voltage level
* $V_{(BR)}$ is measured after $I_{(BR)}$ has been applied for $\leq 300ms$. No suffix is 10% tolerance and suffix A is 5% tolerance for $V_{(BR)}$

MECHANICAL CHARACTERISTICS

Case	DO-214AB
Marking	Alpha-numeric



	DO-214AB			
	Inches		Millimeters	
	Min	Max	Min	Max
A	0.108	0.128	2.743	3.250
B	0.260	0.280	6.600	7.110
C	0.220	0.245	5.590	6.220
D	0.305	0.320	7.750	8.130
E	0.079	0.103	2.007	2.616
L	0.030	0.060	0.760	1.520

SMCJ6036-SMCJ6072A

600W BIDIRECTIONAL SURFACE MOUNT TVS

