

**TVS Diodes - Surface Mount - 1500 Watt Specifications - 1.5SMCJ Series Electrical Characteristics**

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V <sub>wm</sub> (Volts)	Breakdown Voltage		Maximum Stand By Current @V <sub>wm</sub> + I <sub>d</sub> (μA)	10/1000μs Maximum Clamping Voltage @I <sub>ppm</sub> # V <sub>c</sub> Max (Volts)	10/1000μs Rated Peak Impulse Current I <sub>ppm</sub> # (Amperes)
				V <sub>br</sub> Min (Volts)	@I <sub>t</sub> (mA)			
1.5SMCJ5.0	GDD	BDD	5.0	6.40	10	1000	9.6	156.2
1.5SMCJ5.0A	GDE	BDE	5.0	6.40	10	1000	9.2	163.0
1.5SMCJ6.0	GDF	BDF	6.0	6.67	10	1000	11.4	131.6
1.5SMCJ6.0A	GDG	BDG	6.0	6.67	10	1000	10.3	145.6
1.5SMCJ6.5	GDH	BDH	6.5	7.22	10	500	12.3	122.0
1.5SMCJ6.5A	GDK	BDK	6.5	7.22	10	500	11.2	133.9
1.5SMCJ7.0	GDL	BDL	7.0	7.78	10	200	13.3	112.8
1.5SMCJ7.0A	GDM	BDM	7.0	7.78	10	200	12.0	125.0
1.5SMCJ7.5	GDN	BDN	7.5	8.33	1	100	14.3	104.9
1.5SMCJ7.5A	GDP	BDP	7.5	8.33	1	100	12.9	116.3
1.5SMCJ8.0	GDQ	BDQ	8.0	8.89	1	50	15.0	100.0
1.5SMCJ8.0A	GDR	BDR	8.0	8.89	1	50	13.6	110.3
1.5SMCJ8.5	GDS	BDS	8.5	9.44	1	25	15.9	94.3
1.5SMCJ8.5A	GDT	BDT	8.5	9.44	1	20	14.4	104.2
1.5SMCJ9.0	GDU	BDU	9.0	10.00	1	10	16.9	88.7
1.5SMCJ9.0A	GDV	BDV	9.0	10.00	1	10	15.4	97.4
1.5SMCJ10	GDW	BDW	10.0	11.10	1	5	18.8	79.8
1.5SMCJ10A	GDX	BDX	10.0	11.10	1	5	17.0	88.2
1.5SMCJ11	GDY	BDY	11.0	12.20	1	5	20.1	74.6
1.5SMCJ11A	GDZ	BDZ	11.0	12.20	1	5	18.2	82.4
1.5SMCJ12	GED	BED	12.0	13.30	1	5	22.0	68.2
1.5SMCJ12A	GEE	BEE	12.0	13.30	1	5	19.9	75.3
1.5SMCJ13	GEF	BEF	13.0	14.40	1	5	23.8	63.0
1.5SMCJ13A	GEG	BEG	13.0	14.40	1	5	21.5	69.7
1.5SMCJ14	GEH	BEH	14.0	15.60	1	5	25.8	58.1
1.5SMCJ14A	GEK	BEK	14.0	15.60	1	5	23.2	64.7

\* = Add "C" or "CA" suffix for bidirectional device types.

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# = See General Information for Impulse Current Waveform.

**TVS Diodes - Surface Mount - 1500 Watt Specifications - 1.5SMCJ Series Electrical Characteristics - (Continued)**

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage Vwm (Volts)	Breakdown Voltage		Maximum Stand By Current @Vwm+ Id (µA)	10/1000µs Maximum Clamping Voltage @Ippm# Vc Max (Volts)	10/1000µs Rated Peak Impulse Current Ippm# (Amperes)
				Vbr Min (Volts)	@It (mA)			
1.5SMCJ15	GEL	BEL	15.0	16.70	1	5	26.9	55.8
1.5SMCJ15A	GEM	BEM	15.0	16.70	1	5	24.4	61.5
1.5SMCJ16	GEN	BEN	16.0	17.80	1	5	28.8	52.1
1.5SMCJ16A	GEP	BEP	16.0	17.80	1	5	26.0	57.7
1.5SMCJ17	GEQ	BEQ	17.0	18.90	1	5	30.5	49.2
1.5SMCJ17A	GER	BER	17.0	18.90	1	5	27.6	53.3
1.5SMCJ18	GES	BES	18.0	20.00	1	5	32.2	46.6
1.5SMCJ18A	GET	BET	18.0	20.00	1	5	29.2	51.4
1.5SMCJ20	GEU	BEU	20.0	22.20	1	5	35.8	41.9
1.5SMCJ20A	GEV	BEV	20.0	22.20	1	5	32.4	46.3
1.5SMCJ22	GEW	BEW	22.0	24.40	1	5	39.4	38.1
1.5SMCJ22A	GEX	BEX	22.0	24.40	1	5	35.5	42.2
1.5SMCJ24	GEY	BEY	24.0	26.70	1	5	43.0	34.9
1.5SMCJ24A	GEZ	BEZ	24.0	26.70	1	5	38.9	38.6
1.5SMCJ26	GFD	BFD	26.0	28.90	1	5	46.6	32.2
1.5SMCJ26A	GFE	BFE	26.0	28.90	1	5	42.1	35.6
1.5SMCJ28	GFF	BFF	28.0	31.10	1	5	50.0	30.0
1.5SMCJ28A	GFG	BFG	28.0	31.10	1	5	45.4	33.0
1.5SMCJ30	GFH	BFH	30.0	33.30	1	5	53.5	28.0
1.5SMCJ30A	GFK	BFK	30.0	33.30	1	5	48.4	31.0
1.5SMCJ33	GFL	BFL	33.0	36.70	1	5	59.0	25.2
1.5SMCJ33A	GFM	BFM	33.0	36.70	1	5	53.3	28.1
1.5SMCJ36	GFN	BFN	36.0	40.00	1	5	64.3	23.3
1.5SMCJ36A	GFP	BFP	36.0	40.00	1	5	58.1	25.8
1.5SMCJ40	GFQ	BFQ	40.0	44.40	1	5	71.4	21.0
1.5SMCJ40A	GFR	BFR	40.0	44.40	1	5	64.5	23.2

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## TVS Diodes - Surface Mount - 1500 Watt Specifications - 1.5SMCJ Series Electrical Characteristics - (Continued)

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V <sub>wm</sub> (Volts)	Breakdown Voltage		Maximum Stand By Current @V <sub>wm</sub> + I <sub>d</sub> ( $\mu$ A)	10/1000 $\mu$ s Maximum Clamping Voltage @I <sub>ppm</sub> # V <sub>c</sub> Max (Volts)	10/1000 $\mu$ s Rated Peak Impulse Current I <sub>ppm</sub> # (Amperes)
				V <sub>br</sub> Min (Volts)	@I <sub>t</sub> (mA)			
1.5SMCJ43	GFS	BFS	43.0	47.80	1	5	76.7	19.6
1.5SMCJ43A	GFT	BFT	43.0	47.80	1	5	69.4	21.6
1.5SMCJ45	GFU	BFU	45.0	50.00	1	5	80.3	18.7
1.5SMCJ45A	GFV	BFV	45.0	50.00	1	5	72.7	20.6
1.5SMCJ48	GFW	BFW	48.0	53.30	1	5	85.5	17.5
1.5SMCJ48A	GFX	BFX	48.0	53.30	1	5	77.4	19.4
1.5SMCJ51	GFY	BFY	51.0	56.70	1	5	91.1	18.5
1.5SMCJ51A	GFZ	BFZ	51.0	56.70	1	5	82.4	18.2
1.5SMCJ54	GGD	BGD	54.0	60.00	1	5	96.3	15.6
1.5SMCJ54A	GGE	BGE	54.0	60.00	1	5	87.1	17.2
1.5SMCJ58	GGF	BGF	58.0	64.40	1	5	103.0	14.6
1.5SMCJ58A	GGG	BGG	58.0	64.40	1	5	93.6	16.0
1.5SMCJ60	GGH	BGH	60.0	66.70	1	5	107.0	14.0
1.5SMCJ60A	GGK	BGK	60.0	66.70	1	5	96.8	15.5
1.5SMCJ64	GGL	BGL	64.0	71.10	1	5	114.0	13.2
1.5SMCJ64A	GGM	BGM	64.0	71.10	1	5	103.0	14.6
1.5SMCJ70	GGN	BGN	70.0	77.80	1	5	125.0	12.0
1.5SMCJ70A	GGP	BGP	70.0	77.80	1	5	113.0	13.3
1.5SMCJ75	GGQ	BGQ	75.0	83.30	1	5	134.0	11.2
1.5SMCJ75A	GGR	BGR	75.0	83.30	1	5	121.0	12.4
1.5SMCJ78	GGs	BGs	78.0	86.70	1	5	139.0	10.8
1.5SMCJ78A	GGT	BGT	78.0	86.70	1	5	126.0	11.4
1.5SMCJ85	GGU	BGU	85.0	94.40	1	5	151.0	9.9
1.5SMCJ85A	GGV	BGV	85.0	94.40	1	5	137.0	10.4
1.5SMCJ90	GGW	BGW	90.0	100.00	1	5	160.0	9.4
1.5SMCJ90A	GGX	BGX	90.0	100.00	1	5	146.0	10.3

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**TVS Diodes - Surface Mount - 1500 Watt Specifications - 1.5SMCJ Series Electrical Characteristics - (Continued)**

Part Number*	Uni Part Marking	Bi Part Marking	Rated Standoff Voltage V <sub>wm</sub> (Volts)	Breakdown Voltage		Maximum Stand By Current @V <sub>wm</sub> + I <sub>d</sub> ( $\mu$ A)	10/1000 $\mu$ s Maximum Clamping Voltage @I <sub>ppm</sub> # V <sub>c</sub> Max (Volts)	10/1000 $\mu$ s Rated Peak Impulse Current I <sub>ppm</sub> # (Amperes)
				V <sub>br</sub> Min (Volts)	@I <sub>t</sub> (mA)			
1.5SMCJ100	GGY	BGY	100.0	111.00	1	5	179.0	8.4
1.5SMCJ100A	GGZ	BGZ	100.0	111.0	1	5	162.0	9.3
1.5SMCJ110	GHD	BHD	110.0	122.0	1	5	196.0	7.7
1.5SMCJ110A	GHE	BHE	110.0	122.0	1	5	177.0	8.4
1.5SMCJ120	GHF	BHF	120.0	133.0	1	5	214.0	7.0
1.5SMCJ120A	GHG	BHG	120.0	133.0	1	5	193.0	7.9
1.5SMCJ130	GHH	BHH	130.0	144.00	1	5	231.0	6.5
1.5SMCJ130A	GHK	BHK	130.0	144.00	1	5	209.0	7.2
1.5SMCJ150	GHL	BHL	150.0	167.00	1	5	268.0	5.6
1.5SMCJ150A	GHM	BHM	150.0	167.00	1	5	243.0	6.2
1.5SMCJ160	GHN	BHN	160.0	178.00	1	5	287.0	5.2
1.5SMCJ160A	GHP	BHP	160.0	178.00	1	5	259.0	5.8
1.5SMCJ170	GHQ	BHQ	170.0	189.00	1	5	304.0	4.9
1.5SMCJ170A	GHR	BHR	170.0	189.00	1	5	275.0	5.5

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## TVS Diodes - Surface Mount - 1500 Watt - 1.5SMCJ Series Features

### 1.5SMCJ Series Features

- 1500 watt peak pulse power dissipation
- Available in voltages from 5.0V to 170V
- Unidirectional and bidirectional
- Glass passivated junction
- Low clamping factor
- Available in bulk or tape and reel (Reel quantity = 3,000 pieces)
- Each device 100% surge tested
- UL 497B Recognized, File # E135015
- Tape and Reel to EIA Standard RS-481-A

### Absolute Maximum Ratings

- Peak pulse power dissipation (Pppm) at 25°C..... 1500W
- Operating and storage temperatures..... -55°C to + 150°C

### Mechanical Characteristics

- DO214AB package
- UL94V-0 Thermoset Epoxy
- Solder plated terminals
- Solderable per MIL-STD-750 Method 2026

### Mechanical Dimensions

