

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

Uni-directional Bi-directional (C) Device	Part Marking ⁽²⁾	Reverse Stand-Off Voltage V_{RWM} (V)	Breakdown Voltage V_{BR} (V)		Test Current I_T (mA)	Clamping Voltage at I_{PPM} V_C (V)	Peak Pulse Current I_{PPM} (A)	Reverse Leakage Current at V_{RWM} I_R (μA) ⁽³⁾
			Min.	Max.				
SMCJ5V0(C)A	GDE	5.0	6.40	7.00	10	9.2	163.0	1000
SMCJ6V0(C)A	GDG	6.0	6.67	7.37	10	10.3	145.6	1000
SMCJ6V5(C)A	GDK	6.5	7.22	7.98	10	11.2	133.9	500
SMCJ7V0(C)A	GDM	7.0	7.78	8.60	10	12.0	125.0	200
SMCJ7V5(C)A	GDP	7.5	8.33	9.21	1	12.9	116.3	100
SMCJ8V0(C)A	GDR	8.0	8.89	9.83	1	13.6	110.3	50
SMCJ8V5(C)A	GDT	8.5	9.44	10.4	1	14.4	104.2	20
SMCJ9V0(C)A	GDV	9.0	10.0	11.1	1	15.4	97.4	10
SMCJ10(C)A	GDX	10	11.1	12.3	1	17.0	88.2	5
SMCJ11(C)A	GDZ	11	12.2	13.5	1	18.2	82.4	5
SMCJ12(C)A	GEE	12	13.3	14.7	1	19.9	75.3	5
SMCJ13(C)A	GEG	13	14.4	15.9	1	21.5	69.8	5
SMCJ14(C)A	GEK	14	15.6	17.2	1	23.2	64.7	5
SMCJ15(C)A	GEM	15	16.7	18.5	1	24.4	61.5	5
SMCJ16(C)A	GEP	16	17.8	19.7	1	26.0	57.7	5
SMCJ17(C)A	GER	17	18.9	20.9	1	27.6	54.3	5
SMCJ18(C)A	GET	18	20.0	22.1	1	29.2	51.4	5
SMCJ20(C)A	GEV	20	22.2	24.5	1	32.4	46.3	5
SMCJ22(C)A	GEX	22	24.4	26.9	1	35.5	42.3	5
SMCJ24(C)A	GEZ	24	26.7	29.5	1	38.9	38.6	5
SMCJ26(C)A	GFE	26	28.9	31.9	1	42.1	35.6	5
SMCJ28(C)A	GFG	28	31.1	34.4	1	45.4	33.0	5
SMCJ30(C)A	GFK	30	33.3	36.8	1	48.4	31.0	5
SMCJ33(C)A	GFM	33	36.7	40.6	1	53.3	28.1	5
SMCJ36(C)A	GFP	36	40.0	44.2	1	58.1	25.8	5
SMCJ40(C)A	GFR	40	44.4	49.1	1	64.5	23.3	5
SMCJ43(C)A	GFT	43	47.8	52.8	1	69.4	21.6	5
SMCJ45(C)A	GFV	45	50.0	55.3	1	72.7	20.6	5
SMCJ48(C)A	GFX	48	53.3	58.9	1	77.4	19.4	5
SMCJ51(C)A	GFZ	51	56.7	62.7	1	82.4	18.2	5
SMCJ54(C)A	GGE	54	60.0	66.3	1	87.1	17.2	5
SMCJ58(C)A	GGG	58	64.4	71.2	1	93.6	16.0	5
SMCJ60(C)A	GGK	60	66.7	73.7	1	96.8	15.5	5
SMCJ64(C)A	GGM	64	71.1	78.6	1	103.0	14.6	5
SMCJ70(C)A	GGP	70	77.8	86.0	1	113.0	13.3	5
SMCJ75(C)A	GGR	75	83.3	92.1	1	121.0	12.4	5
SMCJ78(C)A	GGT	78	86.7	95.8	1	126.0	11.9	5

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			Min.	Max.				
SMCJ85(C)A	GGV	85	94.4	104.0	1	137.0	10.9	5
SMCJ90(C)A	GGX	90	100.0	111.0	1	146.0	10.3	5
SMCJ100(C)A	GGZ	100	111.0	123.0	1	162.0	9.3	5
SMCJ110(C)A	GHE	110	122.0	135.0	1	177.0	8.5	5
SMCJ120(C)A	GHG	120	133.0	147.0	1	193.0	7.8	5
SMCJ130(C)A	GHK	130	144.0	159.0	1	209.0	7.2	5
SMCJ150(C)A	GHM	150	167.0	185.0	1	243.0	6.2	5
SMCJ160(C)A	GHP	160	178.0	197.0	1	259.0	5.8	5
SMCJ170(C)A	GHR	170	189.0	209.0	1	275.0	5.5	5

Notes:

2. Color band denotes cathode on unidirectional devices only. No color band on bidirectional devices.

3. For bidirectional parts with $V_{RWM} < 10\text{ V}$, the I_R max limit is doubled.

CHARACTERISTICS CURVES

($T_A = 25^\circ\text{C}$ unless otherwise noted)

Fig1. Peak Pulse Power rating Curve

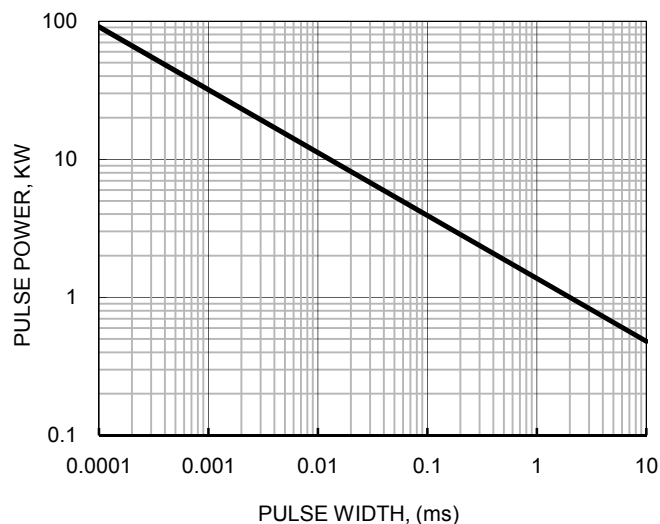


Fig2. Pulse Derating Curve

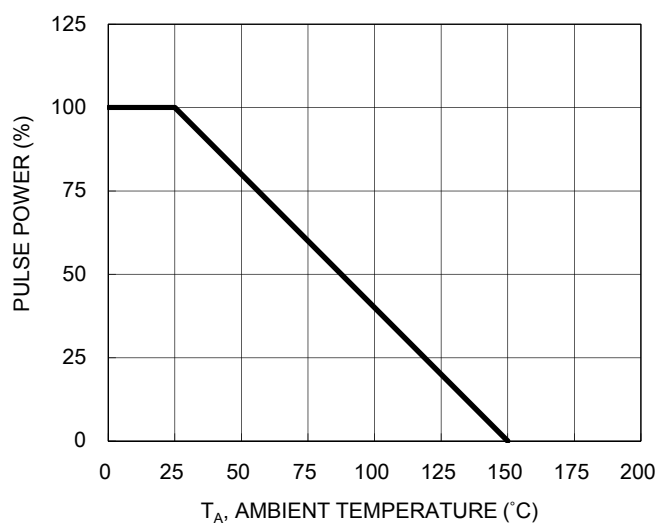


Fig3. Pulse Waveform

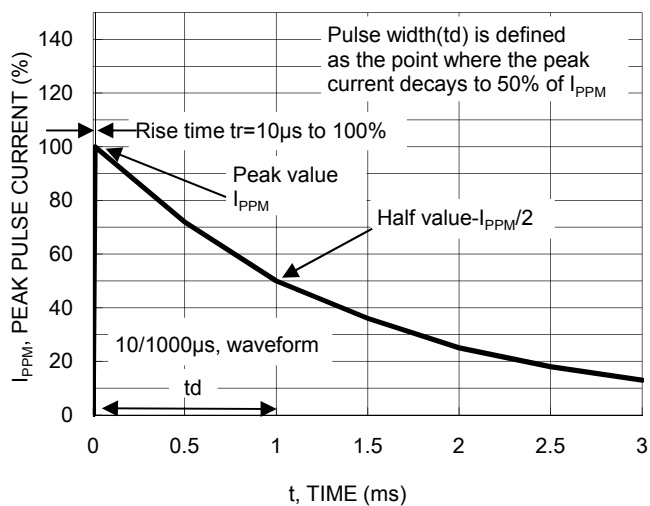


Fig4. Junction Capacitance

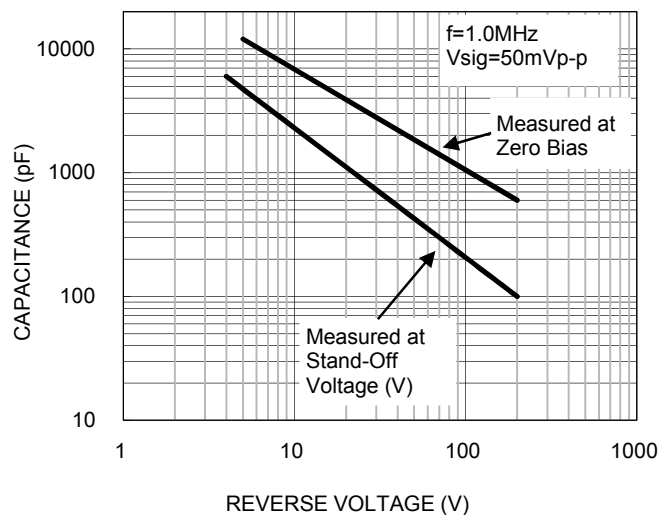
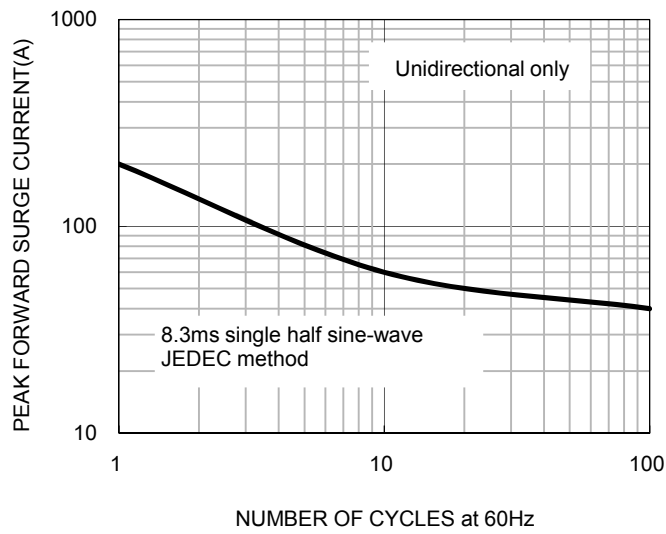
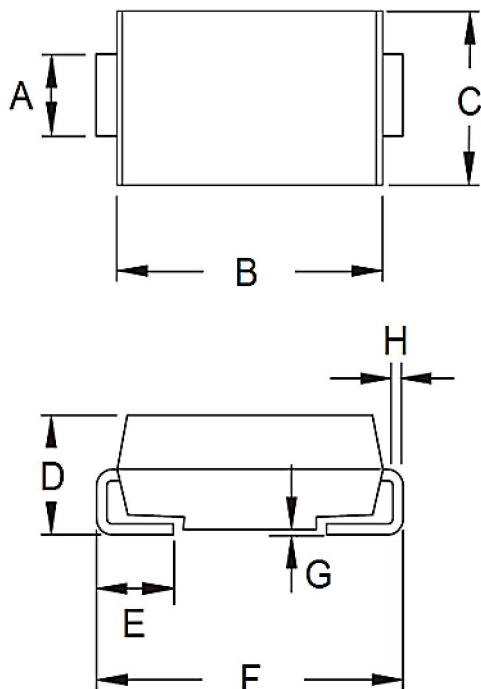


Fig5. Non-repetitive surge current



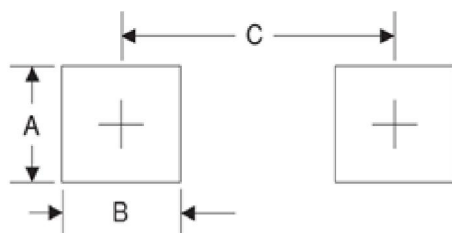
PACKAGE OUTLINE DIMENSIONS

DO-214AB (SMC)



DIM.	Unit (mm)	
	Min	Max
A	3.27	2.75
B	6.60	7.15
C	5.55	6.25
D	-	2.65
E	0.75	1.60
F	7.75	8.15
G	0.05	0.203
H	0.15	0.41

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)
A	2.6
B	3.2
C	7.2

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