

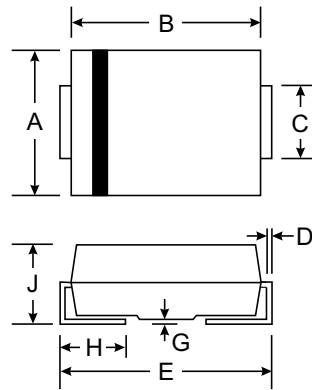
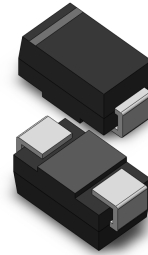
VOLTAGE RANGE: 6.8 - 440 V
POWER: 400Watts

Features

- Glass Passivated Die Construction
- Uni- and Bi-Directional Versions Available
- Excellent Clamping Capability
- Fast Response Time
- Plastic Material: UL Flammability Classification Rating 94V-0

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62
All Dimensions in mm		

Maximum Ratings @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Unit
Peak Pulse Power Dissipation (Non repetitive current pulse derated above T _A = 25°C) (Note 1)	P _{PK}	400	W
Peak Forward Surge Current, 8.3ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method) (Notes 1, 2, & 3)	I _{FSM}	40	A
Instantaneous Forward Voltage @ I _{PP} = 35A (Notes 1, 2, & 3)	V _F	3.5	V
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150	°C

- Notes:
1. Valid provided that terminals are kept at ambient temperature.
 2. Measured with 8.3ms single half sine-wave. Duty cycle = 4 pulses per minute maximum.
 3. Unidirectional units only.



TYPE		Marking		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(UNI)	(BI)	(UNI)	(BI)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
P4SMA6.8	P4SMA6.8C	HD	TD	5.50	6.12	7.48	10	10.8	38.0	1000.0
P4SMA6.8A	P4SMA6.8CA	HE	TE	5.80	6.45	7.14	10	10.5	40.0	1000.0
P4SMA7.5	P4SMA7.5C	HH	TH	6.05	6.75	8.25	10	11.7	36.0	500.0
P4SMA7.5A	P4SMA7.5CA	HK	TK	6.40	7.13	7.88	10	11.3	37.0	500.0
P4SMA8.2	P4SMA8.2C	HL	TL	6.63	7.38	9.02	10	12.5	33.0	200.0
P4SMA8.2A	P4SMA8.2CA	HM	TM	7.02	7.79	8.61	10	12.1	35.0	200.0
P4SMA9.1	P4SMA9.1C	HN	TN	7.37	8.19	10.0	1.0	13.8	30.0	50.0
P4SMA9.1A	P4SMA9.1CA	HP	TP	7.78	8.65	9.55	1.0	13.4	31.0	50.0
P4SMA10	P4SMA10C	HS	TS	8.10	9.00	11.0	1.0	15.0	28.0	10.0
P4SMA10A	P4SMA10CA	HT	TT	8.55	9.50	10.5	1.0	14.5	29.0	10.0
P4SMA11	P4SMA11C	HU	TU	8.92	9.90	12.1	1.0	16.2	26.0	5.0
P4SMA11A	P4SMA11CA	HV	TV	9.40	10.5	11.6	1.0	15.6	27.0	5.0
P4SMA12	P4SMA12C	HW	TW	9.72	10.8	13.2	1.0	17.3	24.0	5.0
P4SMA12A	P4SMA12CA	HX	TX	10.2	11.4	12.6	1.0	16.7	25.0	5.0
P4SMA13	P4SMA13C	HY	TY	10.5	11.7	14.3	1.0	19.0	22.0	5.0
P4SMA13A	P4SMA13CA	HZ	TZ	11.1	12.4	13.7	1.0	18.2	23.0	5.0
P4SMA15	P4SMA15C	IF	UF	12.1	13.5	16.5	1.0	22.0	19.0	5.0
P4SMA15A	P4SMA15CA	IG	UG	12.8	14.3	15.8	1.0	21.2	20.0	5.0
P4SMA16	P4SMA16C	IH	UH	12.9	14.4	17.6	1.0	23.5	18.0	5.0
P4SMA16A	P4SMA16CA	IK	UK	13.6	15.2	16.8	1.0	22.5	19.0	5.0
P4SMA18	P4SMA18C	IN	UN	14.5	16.2	19.8	1.0	26.5	16.0	5.0
P4SMA18A	P4SMA18CA	IP	UP	15.3	17.1	18.9	1.0	25.2	17.0	5.0
P4SMA20	P4SMA20C	IQ	UQ	16.2	18.0	22.0	1.0	29.1	14.0	5.0
P4SMA20A	P4SMA20CA	IR	UR	17.1	19.0	21.0	1.0	27.7	15.0	5.0
P4SMA22	P4SMA22C	IS	US	17.8	19.8	24.2	1.0	31.9	13.0	5.0
P4SMA22A	P4SMA22CA	IT	UT	18.8	20.9	23.1	1.0	30.6	14.0	5.0
P4SMA24	P4SMA24C	IU	UU	19.4	21.6	26.4	1.0	34.7	12.0	5.0
P4SMA24A	P4SMA24CA	IV	UV	20.5	22.8	25.2	1.0	33.2	13.0	5.0
P4SMA27	P4SMA27C	IY	UY	21.8	24.3	29.7	1.0	39.1	11.0	5.0
P4SMA27A	P4SMA27CA	IZ	UZ	23.1	25.7	28.4	1.0	37.5	11.2	5.0
P4SMA30	P4SMA30C	JD	VD	24.3	27.0	33.0	1.0	43.5	10.0	5.0
P4SMA30A	P4SMA30CA	JE	VE	25.6	28.5	31.5	1.0	41.4	10.0	5.0
P4SMA33	P4SMA33C	JF	VF	26.8	29.7	36.3	1.0	47.7	9.0	5.0
P4SMA33A	P4SMA33CA	JG	VG	28.2	31.4	34.7	1.0	45.7	9.0	5.0
P4SMA36	P4SMA36C	JH	VH	29.1	32.4	39.6	1.0	52.0	8.0	5.0
P4SMA36A	P4SMA36CA	JK	VK	30.8	34.2	37.8	1.0	49.9	8.4	5.0
P4SMA39	P4SMA39C	JL	VL	31.6	35.1	42.9	1.0	56.4	7.4	5.0
P4SMA39A	P4SMA39CA	JM	VM	33.3	37.1	41.0	1.0	53.9	7.8	5.0
P4SMA43	P4SMA43C	JN	VN	34.8	38.7	47.3	1.0	61.9	6.8	5.0
P4SMA43A	P4SMA43CA	JP	VP	36.8	40.9	45.2	1.0	59.3	7.1	5.0
P4SMA47	P4SMA47C	JQ	VQ	38.1	42.3	51.7	1.0	67.8	6.2	5.0
P4SMA47A	P4SMA47CA	JR	VR	40.8	44.7	49.4	1.0	64.8	5.0	5.0
P4SMA51	P4SMA51C	JS	VS	41.3	45.9	56.1	1.0	73.5	5.7	5.0
P4SMA51A	P4SMA51CA	JT	VT	43.6	48.5	53.6	1.0	70.1	6.0	5.0



TYPE		Marking		Reverse Stand-Off Voltage	Breakdown Voltage Min. @I _T	Breakdown Voltage Max. @ I _T	Test Current	Maximum Clamping Voltage @I _{PP}	Peak Pulse Current	Reverse Leakage @V _{RWM}
(UNI)	(BI)	(UNI)	(BI)	V _{RWM} (V)	V _{BR MIN} (V)	V _{BR MAX} (V)	I _T (mA)	V _C (V)	I _{PP} (A)	I _R (uA)
P4SMA56	P4SMA56C	JU	VU	45.4	50.4	61.6	1.0	80.5	5.2	5.0
P4SMA56A	P4SMA56CA	JV	VV	47.8	53.2	58.8	1.0	77.0	5.5	5.0
P4SMA62	P4SMA62C	JY	VY	50.2	55.8	68.2	1.0	89.0	4.7	5.0
P4SMA62A	P4SMA62CA	JZ	VZ	53.0	58.9	65.1	1.0	85.0	5.0	5.0
P4SMA68	P4SMA68C	RF	WF	55.1	61.2	74.8	1.0	98.0	4.3	5.0
P4SMA68A	P4SMA68CA	RG	WG	58.1	64.6	71.4	1.0	92.0	4.6	5.0
P4SMA75	P4SMA75C	RL	WL	60.7	67.5	82.5	1.0	108	3.9	5.0
P4SMA75A	P4SMA75CA	RM	WM	64.1	71.3	78.8	1.0	103	4.1	5.0
P4SMA82	P4SMA82C	RN	WN	66.4	73.8	90.2	1.0	118	3.6	5.0
P4SMA82A	P4SMA82CA	RP	WP	70.4	77.9	86.1	1.0	113	3.7	
P4SMA91	P4SMA91C	RQ	WQ	73.7	81.9	100	1.0	131	3.2	5.0
P4SMA91A	P4SMA91CA	RR	WR	77.8	86.5	95.5	1.0	125	3.4	5.0
P4SMA100	P4SMA100C	RU	WU	81.0	90.0	110	1.0	144	2.9	5.0
P4SMA100A	P4SMA100CA	RV	WV	85.5	95.0	105	1.0	137	3.1	5.0
P4SMA110	P4SMA110C	RW	WW	89.2	99.0	121	1.0	158	2.7	5.0
P4SMA110A	P4SMA110CA	RX	WX	94.0	105	116	1.0	152	2.8	5.0
P4SMA120	P4SMA120C	RY	WY	97.2	108	132	1.0	173	2.4	5.0
P4SMA120A	P4SMA120CA	RZ	WZ	102	114	126	1.0	165	2.5	5.0
P4SMA130	P4SMA130C	SD	XD	105	117	143	1.0	187	2.2	5.0
P4SMA130A	P4SMA130CA	SE	XE	111	124	137	1.0	179	2.3	5.0
P4SMA150	P4SMA150C	SH	XH	121	135	165	1.0	215	2.0	5.0
P4SMA150A	P4SMA150CA	SK	XK	128	143	158	1.0	207	2.0	5.0
P4SMA160	P4SMA160C	SA	XA	130	144	176	1.0	230	1.8	5.0
P4SMA160A	P4SMA160CA	SB	XB	136	152	168	1.0	219	1.9	5.0
P4SMA170	P4SMA170C	SL	XL	138	153	187	1.0	244	1.7	5.0
P4SMA170A	P4SMA170CA	SM	XM	145	162	179	1.0	234	1.8	5.0
P4SMA180	P4SMA180C	SN	XN	146	162	198	1.0	258	1.6	5.0
P4SMA180A	P4SMA180CA	SP	XP	154	171	189	1.0	246	1.7	5.0
P4SMA200	P4SMA200C	SQ	XQ	162	180	220	1.0	287	1.5	5.0
P4SMA200A	P4SMA200CA	SR	XR	171	190	210	1.0	274	1.53	5.0
P4SMA220	P4SMA220C	SS	XS	175	198	242	1.0	344	1.16	5.0
P4SMA220A	P4SMA220CA	ST	XT	185	209	231	1.0	328	1.22	5.0
P4SMA250	P4SMA250C	ZD	YD	202	225	275	1.0	360	1.1	5.0
P4SMA250A	P4SMA250CA	ZE	YE	214	237	263	1.0	344	1.16	5.0
P4SMA300	P4SMA300C	ZF	YF	243	270	330	1.0	430	0.93	5.0
P4SMA300A	P4SMA300CA	ZG	YG	256	285	315	1.0	414	0.97	5.0
P4SMA350	P4SMA350C	ZH	YH	284	315	385	1.0	504	0.79	5.0
P4SMA350A	P4SMA350CA	ZK	YK	300	333	368	1.0	482	0.83	5.0
P4SMA400	P4SMA400C	ZL	YL	324	360	440	1.0	574	0.70	5.0
P4SMA400A	P4SMA400CA	ZM	YM	342	380	420	1.0	548	0.73	5.0
P4SMA440	P4SMA440C	ZN	YN	356	396	484	1.0	631	0.63	5.0
P4SMA440A	P4SMA440CA	ZP	YP	376	418	462	1.0	602	0.65	5.0



Ratings and Characteristic Curves $T_A=25^\circ\text{C}$ unless otherwise noted

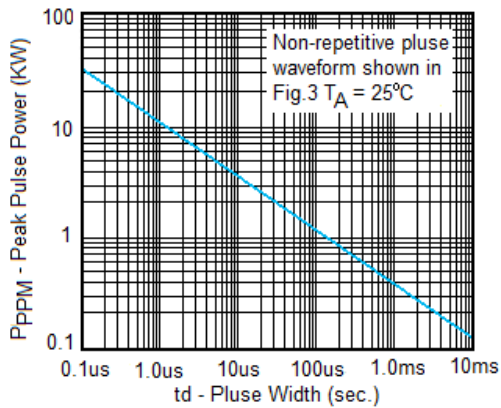


Fig. 1 Peak Pulse Power Rating

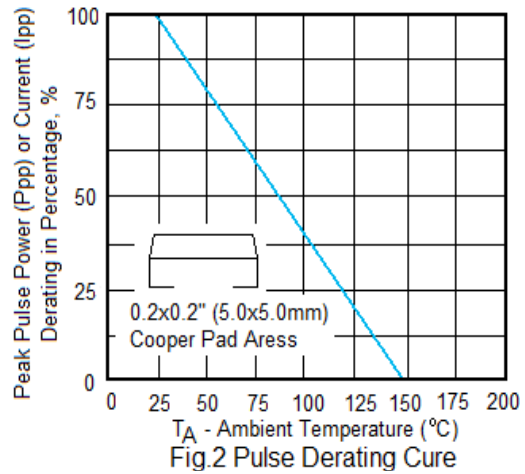


Fig. 2 Pulse Derating Curve

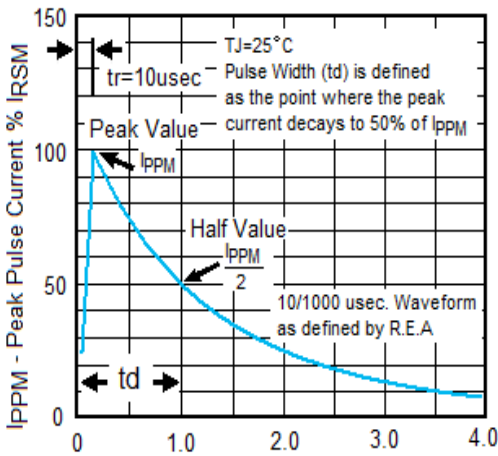


Fig. 3 Pulse Waveform

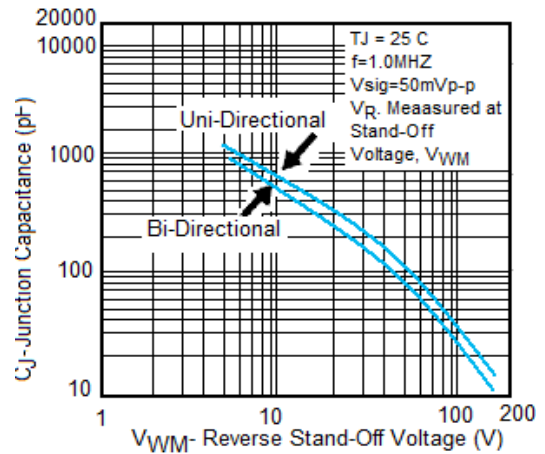


Fig. 4 - Typical Junction Capacitance